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ABSTRACT

The articles contained in the first half of this volume are by community college practitioners who have sought to stimulate instructional change. Articles in the second half of the volume suggest several different strategies for implementing needed change. Topics discussed include: a brief history and analysis of factors working for and against instructional change in the two-year college; a faculty member's personal evolution toward use of innovative instructional methods; the role of the department chairperson, the dean, the president, and of trustees in facilitating instructional change; faculty-determined, faculty development programs focusing on development of more effective instructional modes; the importance of an organizational climate conducive to instructional change; the role and effective use of external consultants; the role of the university in supporting instructional change in community colleges; the role of a staff development committee in facilitating change; and, the future of instructional change. A review of pertinent literature and a bibliography are included. Contributors include: James O. Hammons, Sharon B. Jaggard, Wanda E. Thomas, Dan N. Stallings, Thomas M. Hatfield, Malcolm Pennypacker, Walter Hunter, Alberta Goodman, Raymond E. Schultz, Terry H. Smith Wallace, and Elizabeth Rinnander. (JDS)

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changing instructional strategies

james o. hammons
issue editor

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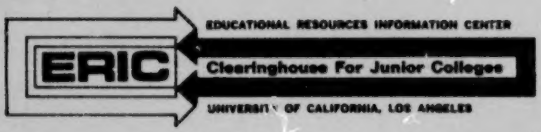

CHANGING INSTRUCTIONAL STRATEGIES
New Directions for Community Colleges
Volume V, Number 1, Spring 1977
James O. Hammons, Issue Editor

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contents

editor's notes *james o. hammons* **vii**

The editor of this issue looks at the history of instructional change, examines factors presently at work for and against change, and presents an overview of the monograph.

a faculty monocle: accolades and heartaches *sharon b. jaggard* **1**

An innovative faculty member recounts how evolutionary and revolutionary changes in her teaching methods took place.

the chairperson's role in promoting better teaching *wanda e. thomas* **13**

A chairperson with experience in two large community colleges tells it "like it is" as she offers suggestions on the chairperson's role in facilitating instructional change.

a dean's experience with instructional change *dan n. stallings* **19**

A dean of a small but highly innovative college shares his experiences.

the president's involvement in instruction *thomas m. hatfield* **23**

In order for instructional change to be effective, it must be part of a planned change strategy involving the whole institution.

a trustee's role in changing instruction *malcolm pennypacker* **31**

The chairman of the board of trustees of one of the nation's most innovative colleges shares his perception of instructional change.

using consultants to improve instruction *james o. hammons* *walter hunter* **37**

Two consultants who have assisted more than 300 community colleges share some observations.

internal change agents *alberta goodman* **45**

A number of colleges are now attempting to encourage and facilitate instructional change by employing an internal change agent. One such person shares some impressions.

the university as an agent of instructional change in community colleges *raymond e. schultz* **53**

Contrary to popular opinion, university faculty members have contributed to instructional change in community colleges and are continuing to do so in a number of ways.

the staff development committee: a model for instructional change *terry h. smith wallace* **65**

Of a number of approaches to causing instructional change, the faculty committee is one that has worked for Harrisburg Area Community College.

instructional change: some predictions *james o. hammons* **75**

More individualized learning and computer-assisted instruction are only two of the instructional changes that lie ahead.

instructional change: sources and information *elizabeth rinnander* **81**

Additional references on instruction and instructional change from the ERIC Clearinghouse for Junior Colleges.

index **89**

editor's notes

The need for instructional change that will result in more effective, more efficient, less anxiety producing learning and in improved self-concepts for a variety of students is well documented in the literature of the community college. This requirement is clearly implied in the very nature of the two-year college, which destines it to be a teaching-oriented institution *for* the community, located *in* the community, operated under the *control* of the community, and *responsive* to the needs of its citizens.

However, it was not until the late 1960s, as colleges began to be located in the metropolitan areas and as thousands of students previously considered "poor college material" took advantage of open-door admissions policies, that faculty members and administrators began to realize that neither the traditional lecture approach of the university nor the pedagogy of the high schools (from which many of the teachers came) was effective in serving the needs of this new clientele. Before that, an impartial observer would have had to agree with Mayhew's comment that "the hallways of Morgan Park Junior College in the 1930s would have revealed substantially the same sounds and demonstrated the same student and teacher behavior which one can find in the Foothill College in 1967" (Mayhew, 1967, p. 12). Mayhew's observation supported earlier findings from an exploratory survey of 91 two-year colleges (roughly one in every eight of the 704 listed in the 1963 Junior College Directory) by B. Lamar Johnson, who reported the following: "The general picture revealed in the survey is one of significantly less experimentation than would be expected, or certainly hoped for, in an institution which is often referred to as 'the most dynamic unit of American education'" (1964, p. 13).

past preoccupations

Why was there so little experimentation and innovation in the classroom during the early formative years as well as later when enrollments mushroomed and the number of colleges multiplied? The roots of the problem lay, in part, in the preoccupation of the two-year college with determining its place in American education. No other institution of American education has undergone so many changes in

fundamental purposes and goals. However, until ten years ago, the changes were primarily changes in function and programs rather than in instructional methodology. There were three major reasons for this lack of instructional innovation.

During much of their early history, most two-year colleges were involved in proving themselves worthy of being called "college" rather than grades 13–14. The inferiority complex of two-year colleges was so widespread that most elected to fashion themselves after nearby four-year colleges, to which most of their students were expected to transfer. Unfortunately, the models they chose to emulate were wedded to the lecture, laboratory, and seminar methods of instruction derived from German universities and designed for academically mature students in a research-oriented situation.

A second set of factors seriously retarding instructional development in many colleges emanated from their very close ties with the local public school boards and the strong conservatism prevalent during the early half of this century regarding the manner in which public education should be conducted. The fact that the vast majority of the faculty and administrators came from public school backgrounds compounded the negative effect of the public school influence on experimentation.

A third element inhibiting innovative instruction was the necessary preoccupation of the leaders of the two-year-college movement with the tasks of developing programs and of recruiting and securing funds for operating costs and construction—a critically important function if the colleges were to accommodate the growing number of students wishing to enroll. In view of these factors, it should come as no surprise that, as a cursory reading of the titles of articles appearing in the 1960s in the *Junior College Journal* indicates, very little attention was given to instructional experimentation and innovation until the middle of the decade, other than the usual rhetoric about "excellence in teaching." When we remember that the number of students in two-year colleges increased from 232,000 in 1930 to 818,000 in 1960 and then jumped to 2,500,000 by 1970, the past emphasis on growth is understandable.

transition period

The period of the middle and late sixties was a major transition period, if one may judge by the increase in instructional innovation

and experimentation between Johnson's exploratory survey in 1964 and his more complete survey three years later. This same shift toward increased interest in better teaching was also evident in the titles of articles in the *Junior College Journal*, in conference topics, and in publications like the *Occasional Reports* series of the UCLA Junior College leadership program. For example:

1961 Faculty Handbooks in California Public Junior Colleges
1962 Board Policy Manuals in California Public Junior Colleges
1962 Institutional Research in the Junior Colleges
1963 President's Report in American Junior Colleges
1963 Establishing Junior Colleges
*1964 Islands of Innovation
*1964 New Directions for Instruction in the Junior College
1966 The Junior College Library
*1967 Systems Approaches to Curriculum and Instruction in the Open-Door Policy
1967 Effective Junior College Programs of Community Services: Rationale, Guidelines, Practices
*1968 Focus on Learning: Preparing Teachers for the Two-Year College
*1968 The Experimental Junior College

A number of factors were involved in this increased interest and emphasis. First, as a careful reading of Johnson's study indicates, a great many of the "islands of innovation" he discovered were in a few of the newly established colleges, colleges with new boards, new facilities, new administrations, and new faculties. Several of these—St. Louis (MO), Oakland (MI), Colorado Mountain (CO), Golden West (CA), Western Piedmont (NC), Rock Valley (IL), Santa Fe (FL), and Pima (AZ)—were deliberately planned to be experimental, while others, like Roger Williams (RI), Miami-Dade (FL), and Delta (MI), were consciously attempting to rebuild themselves as experimental colleges and were deliberately encouraging experimentation and innovation. The success reported by these schools and the publicity they received encouraged other colleges to emulate them and gave some degree of legitimacy to experimentation.

A second force also at work in the late sixties, and one of great significance, was the enrollment of thousands of nontraditional students for whom the standard methods of instruction were not working. In college after college, conscientious faculty members realized that the

methods they had used with reasonable success before were just not effective with the "new" student, and they began searching for techniques that would be.

A third major factor was the number of new colleges that were opening and subsequently setting in motion a happy game of musical chairs as deans left to become presidents, chairpersons moved up to become deans, and last year's new faculty members found themselves to be department heads. Each move offered an opportunity to build afresh, to avoid past mistakes, and to advance instructional development yet further by building on innovations validated by experience in former positions.

Still another aid to experimentation was the appearance of a sophisticated technology and the availability of local, state, and federal funds for the purchase of tape recorders and slide projectors if not television studios, dial-access systems, language laboratories, and student response systems. Giving added momentum was the diffusion of innovative ideas by the *Journal*, by presentations at the Annual Meeting of the American Association of Junior Colleges, and by countless numbers of regional and local conferences and workshops.

Several other elements contributing to the movement toward instructional development included a pool of talented young and middle-aged men and women specifically trained for community college leadership roles in university doctoral programs sponsored by the W.K. Kellogg Foundation; faculty training programs funded by the Developing Institutions Program and the Educational Professions Development Act; millions of federal dollars for equipment purchases; and legislation passed in several states severing the connection between the community college and local school boards, thus allowing the colleges to become more autonomous.

the present

However, the present situation is quite different. The number of new colleges opening each year is one-tenth the number of those started in the 1960s, and although existing colleges continue to grow, most of the increase is in part-time students who are either absorbed into already existing courses and programs or are to be found in burgeoning evening classes taught by adjunct faculty. And with the exception of a few colleges fortunate enough to be involved in one of the various Title III programs, or to be recipients of a limited amount of

vocational education funds, the federal dollars are gone. State and local funding is becoming increasingly more difficult to obtain because of widespread economic problems and strong competition for limited tax dollars from other more visible (and vocal) governmental entities and social concerns, such as public welfare, environmental control, waste disposal, and transportation.

Thus, after more than a decade of unparalleled growth and development, today's community colleges find themselves facing perhaps their greatest challenges. In this environment, is it reasonable to expect instructional change? Or will colleges retreat into the security of traditional practice? In my view, change is certain; the only remaining questions are the direction and the rate of change. One way of answering them is to examine the forces that are working both for and against innovation and experimentation. Such a "force field" analysis is a strategy first proposed by Kurt Lewin, who in 1947 suggested that any situation in which change is to be attempted may be viewed as a dynamic balance of forces working in opposite directions. In our case, the forces driving for change include the following:

- the changing nature of the student clientele and the consequent need to adapt instruction to meet their needs.
- the continuing evolution of technological techniques to support instructional experimentation (video cassettes, video discs, audio-tutorial methods, P.S.I.).
- the means for the rapid diffusion of ideas through journals, books, ERIC, meetings, conferences, and the like.
- verified interest in change by both faculty members and administrators as shown in regional and national assessments of need.
- the widespread availability of "islands of innovation" where teachers can actually see new methods in action.
- pressures for accountability and productivity from cost-conscious trustees, state officials, and legislators.
- the increased competition for students that encourages the development of instructional practices to both attract and hold students.
- the availability of good quality instructional materials.
- the increased capacity of colleges to support faculty efforts at instructional change.
- the reduced mobility of faculty members, leading to the development of the career community college faculty member.
- student acceptance of instructional change.
- a growing body of literature supporting the effectiveness of instructional change.

• cost studies, such as those of the League of Innovation (Berchin, 1972), which indicate that new approaches are likely to cost less than traditional methods.

Arrayed against these are a number of formidable obstacles, including, surprisingly, many of the same factors mentioned above, especially the following:

• the emergence of a "career" faculty: although it is true that a permanent faculty member is more likely to take an active interest in the institution, that interest might very well be manifested in maintaining the status quo—or in improving one's position within the college through collective bargaining.

• student receptivity to change: students are so receptive to change that they can foster an "anything goes" attitude which does not encourage careful planning, studied implementation, and subsequent evaluation.

• pressures for accountability and productivity: regulations requiring the reporting of such data as credit hours, faculty load, and class days determine the "acceptability" of instructional practice—and are always tradition-oriented.

In addition to these dual-natured forces, a number of others are restraining if not actually stifling, change. Some of the more serious of these include:

• a lack among administrators of knowledge and training on the process of causing, implementing, managing, and evaluating change.

• the failure to give a high budget *priority* to items essential for supporting instructional change.

• the paucity of suitable incentives for faculty experimentation. As one faculty member commented, "If my students do not complain that I give too many F's, if I let people see me often enough to know that I am keeping my office hours, if I regularly attend my committee meeting assignments, if I accumulate the necessary number of credits beyond my master's degree, and if I don't cause any problems, I will get tenure and, in due time, will be promoted, maybe even become division chairperson. If I do more than this, my salary will not increase any faster nor will I be promoted any quicker. Why should I change?"

• a worsening budget situation, with the resultant high probability that "nonessentials" like faculty fellowships, staff development funds,

travel, and support for the learning resources center will be reduced first.

- the lack of knowledge among many faculty members about instructional innovation and the absence of effective faculty development programs to fill this vacuum.
- the insufficient number of qualified consultants to assist in the change process.
- the climate of mistrust or the adversary relationship that exists on many campuses, including colleges which do not have collective bargaining agreements.

Obviously, the struggles between these formidable negative pressures and the positive forces will produce different outcomes on each community college campus. And needless to say, not all of the conflicts will be resolved in favor of productive change. The extent to which forces for change overcome those against change rests primarily on how well administrators and board members can initiate, facilitate, and manage change and on how much the faculty is able and willing to change. However, each group—faculty members, administrators (including chairpersons), and trustees—has a different perspective, both on the need for innovation and on its role in accomplishing change.

overview of this sourcebook

In the first half of this issue of *New Directions for Community Colleges,* practitioners from each of the foregoing groups present their views. The second half suggests several different approaches to needed change.

Appropriately enough, the first view is that of a faculty member. When Sharon Jaggard wrote this article, she was a faculty member at Burlington County Community College (New Jersey). Previously, she had taught in an Indiana vocational-technical institute. An acknowledged "innovator," Ms. Jaggard represents the thousands of faculty members who, while willing to change, have been frustrated in their efforts by administrative inadequacies.

Many persons in the community college, including myself, are convinced that the critical link in the change chain is the department or division chairperson. We are fortunate in having Wanda Thomas, who is now assistant dean for administrative and natural science at the Boyce Campus of Allegheny Community College (Pennsylvania) and

was formerly a chairperson at Cuyahoga (Ohio), to share her observations concerning the role a chairperson plays in instructional change.

Next, Dan Stallings, vice-president of instruction at Caldwell Community College (North Carolina), chronicles the experiences of his institution in accomplishing instructional change and shares with us some of the lessons learned.

The chief executive officer (CEO) of an institution sets the direction of the institution. A president whose position in favor of instructional change is well known is Thomas Hatfield, president of Austin Community College (Texas). In a thought-provoking piece, Hatfield describes the role of the president in creating an environment for change.

Very little has been written about the role of the trustees in facilitating instructional change. Yet as Malcolm Pennypacker, chairman of the board of Burlington County College (New Jersey) shows, his board's actions in selecting a president, approving policies, and "paving the way" for change proved to be essential ingredients in innovation at Burlington.

The second half of the issue, on approaches to causing change, is launched with an article on the effective uses of external consultants. Walter Hunter and I review our experiences as consultants to more than three hundred community colleges in more than forty states and Canada.

Another means to bring about change that has begun to receive attention in this country and Canada is the internal change agent. This is a regular staff member who, on a full- or part-time basis, is charged with initiating, encouraging, and managing innovators in teaching. Variously known as educational development officers, instructional development specialists, or associate deans for curriculum development, these talented folks now number more than one hundred and are increasing each year. It is fitting that the contributor from this group, Alberta Goodman, comes from one of the first community colleges to experiment with the idea—Miami-Dade Community College (Florida).

As Raymond Schultz points out, the university professor has, over the years, assisted administrators in furthering instructional change in a variety of ways. Schultz is uniquely qualified to describe some ways faculty members and administrators can work together, having served as a university professor in three different universities in three very different parts of the country.

Next, Terry Wallace of Harrisburg Area Community College (Pennsylvania) describes yet another approach to change, the faculty

committee. Although still in its infancy, the program at Harrisburg has the potential for serving as a model on the East Coast as a similar committee at Parkland College (Illinois) has for the Midwest.

And what lies ahead? Is the past prologue to the future? Will community colleges be so involved with matters of finance and purpose that instructional improvement is given a low priority, or will the next decade see significant teaching innovations in large numbers of colleges? In the last article, I attempt a few predictions.

James O. Hammons
Issue Editor

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A case study of instructional change from the perspective of a faculty member who experienced it.

a faculty monocle: accolades and heartaches

sharon b. jaggard

Making an instructional change, like making most changes in one's life, can be at once both a frightening and an exciting experience, and during the process, we often are—perhaps fortunately—unaware of a distinct beginning. We plod slowly forward until the day when the magnitude of change becomes greater than our semiconscious plodding and we have a crisis to face: are we to pursue the present direction and risk possible failure, or should we halt the march and safely stand what ground we have gained?

The nature of the instructional change I made was that of leaving the textbook-oriented, lecture-discussion teaching style which I had experienced as a student, and with which I felt comfortable as a teacher, and changing to a multitrack, largely individualized approach based on something called a "systematic approach to instruction." This change required me to, among other things, embrace behavioral objectives, put into writing all of my instructional goals, designs, and secrets, develop alternate learning strategies, become an author of self-instructional learning materials (packages/tapes/slides), predetermine exactly how I was going to evaluate students incorporating both formative and summative criterion-referenced measures, and, most

critically, make all of this public—actually *give* it to my students and administrators.

For one who would find a schedule difficult even with Big Ben tied to her wrist, who responds automatically to an open, flexible environment, and who is likely to throw a year's planning out the window for one spontaneous moment of academic excitement, the thought of all that apparent structure and organization was, indeed, frightening. But the promise of a pedagogy which would help students learn more, and learn it more efficiently, was well worth a try—and that was exciting.

What forces brought me to such a precipice? Why did I think I needed to make any instructional changes? I had been teaching for several years and had always received favorable evaluations on my efforts. My career seemed to be progressing, so why was it necessary to alter anything?

That is the issue addressed in this article along with some observations on feelings experienced in the process, results achieved, and obstacles met. Although it is essentially a case study of my experience, it is substantiated generally by consulting experience in the past three years and by my current dissertation research with sixty community college faculty members in which I am attempting to identify the forces that have caused them to try new teaching methods. The consulting and research have shown me that I am not unique—that although this is written in first person, it is a view of instructional change seen not through a monocle, but through a prism reflecting the similar experiences of "change-minded" teachers who have been innovative and experimental. As I have worked and talked with other faculty members, I have found that what caused me to change also brought many of them to do the same: that they experienced feelings about the process similar to mine; that we were faced with the same problems and shared many of the same results.

In general, the following are some of the more obvious reasons why they, and I, explored new techniques.

One of the most critical reasons was the lack of success we were experiencing with traditional approaches, especially in entry-level or very elementary courses. For example, I discovered a 50 percent statewide failure rate in business math, one of the courses I taught. A colleague reported that 80 percent of the math students enrolled in entering courses required an average of 2.5 out of five units of basic arithmetic, while a nearby college found that 92 percent of the entering freshmen needed developmental reading and writing courses. In my opinion, we had let these students in through our "open door" admis-

sions policy. Now it was up to us to implement that policy by providing ways for those students to learn. The challenge, for me and many of my colleagues, was to find a means of assisting these nontraditional students to achieve and maintain traditional college-level standards.

Compounding the problem of quality was the problem of quantity. My class numbers were increasing much faster than the number of full-time faculty members in the division. This growth was due partly to overall increases in community college enrollments and partly to changes in course prerequisites, resulting in a class size of at least 200 students a semester in one course and approximately 75 additional students per term in another course. Additionally, a third course I taught was apparently experiencing enrollment increases because students preferred it to some other options.

The division was not in a position to add three full-time teachers for these classes, nor was there anyone else in the division who could assume the overloads, since many of their classes were demonstrating a similar phenomenon. My problem, then, was how to manage this number of students and how to give them the individual attention and tutoring many of them needed in order to improve and thereby affect the grade curve.

The third and not least significant impetus was the review and evaluation of my performance. This potent force can bring faculty members to change—or it can put them in chains. If administrators want their faculty to continue with conventional instruction, they can use their influence openly or subtly in the evaluation process. I was fortunate to join a college that had a mission to be innovative and saw itself as experimental from its inception. There is no question but that the expression of this mission in the original criteria for faculty evaluation spurred me to change my teaching methods.

change by accident or by design?

I cannot recall its source, but the following profundity undoubtedly came from one past adolescence: "We are where we are by accident more than by design." As I reflected pentimento style, on how my change occurred I became aware that it was both evolutionary and revolutionary. Some of the change was an accidental result of the accumulated experiences characteristic of slow development, whereas other parts of the process resembled a calculated, designed revolution. However, it was the revolutionary aspect that was the more obvious and that seemed to bring the more drastic and accelerated change.

4

Partly Evolution. My first attempt at instructional change was made during my student-teaching experience. I was working in two disciplines under two very fine human beings who were dedicated teachers. I received two criticisms from my supervisors. In the business class, my supervising teacher intimated that my instructional methods were excellent, but warned that I would have to change my "soft, sexy voice" to something resembling a bellow of a drill sergeant if I expected to be heard over the fifty typewriters in the room! Fair enough. I have changed—and gotten used to the resulting annual attack of laryngitis. In the junior literature class I had developed the habit of rearranging the seats into circles in order to facilitate discussions among the class members. It was working beautifully. I liked it; the students liked it; and they were actually reading and attempting to share insights when, during the Christmas break, I was invited to the beautiful lakefront home of my particularly striking and delightful supervising teacher. Over eggnog, she indicated I seemed to be getting good results, but that I wasn't going to "cover the whole book at that rate," so we spent the remainder of the afternoon outlining the rest of the textbook, neatly dividing the units by first the number of weeks, then by the class days. I eventually received a "superior" rating from this teacher because she assumed I had learned how important it was to "cover" the textbook material. However, the real lesson I learned was from the reaction of the students in that class when I changed back to the "cover-the-text" system. Their confusion and frustration impressed upon me that it was how much they were learning, not exclusively how much I was covering that was significant. (How many of us have kept our old high school and college textbooks with the intention of stealing some free time in our adult lives to really learn the interesting material we were skim-reading and cramming on Thursday nights in order to make our As and Bs on Friday's tests?) Apparently, I was developing a belief in mastery learning long before I knew the formal theory. I remained somewhat dormant in terms of any instructional changes for the next two and one-half years, which I spent as a newly employed high school English and business teacher. In actuality, I could better have been called "the master sponsor," since I sponsored the student newspaper, a chapter of the national honorary journalism society, the junior class and the senior class and all of their activities. I even managed to sponsor a few field trips for my regular classes. Our main tasks as teachers at that high school, as it became clear to me, were to discipline and to entertain, and I soon found that the really clever disciplined in an entertaining way!

Somewhat in the tradition of John Dewey, by trial and error, I found that high school juniors and seniors posed few discipline problems when they were busy and interested and that they appeared to sustain the greatest vector and valence of interest when they were involved in something they could manage themselves and had a part in planning. As a result, I began to see myself as a resource person and counselor/advisor—and a sponsor—and was amazed when the students proved to be more capable than I had stereotyped and proved that they could handle very demanding and complex tasks. (Of course, I really couldn't take any credit for the very bright minds that learned in spite of my groping.) I remember one course in particular which was assigned to me, but in which I had no preparation. I announced at first class meeting that we would learn together. That experience broke the "superior-inferior, teacher-student" role in my mind forever.

By this time in my teaching career, I had—by evolution—taken two steps away from the instructional approaches I had experienced as a student and therefore had automatically employed as a teacher. I had learned to focus on how much material the students master or learn rather than how much material they cover, and I had developed a respect for their abilities and desire to manage their own learning if given the opportunity.

My next change was pure unadulterated fun and it was almost a crime to be paid for it. I was hired as one of the charter faculty members of a new vocational-technical college and was to design and teach the entire fifteen-course two-year secretarial curriculum, as well as teach the English classes to the students in welding, auto mechanics, electronics, and engineering. For facilities I had a house of my own—we all had a house of our own. My office was the dining room; the shorthand lab was the living room; the bedrooms became the typewriting and office machines rooms—and of course, the students and I "brown bagged" it in the kitchen.

For the first time, I was working with adult students, some of whom were older than I and none of whom was there because of mandatory attendance requirements. My classes were small, however, and comprised as many levels of entry skill as there were students.

The number of different preparations, the wide range in student ability levels combined with the opportunity to "do my own thing" in the privacy of my own house soon found me experimenting with individualized instruction, while the realization that the reputation and continuation of the program depended on the employability of my students made me acutely aware of accountability for the final product—

several years before the term became popular. Since it seemed only logical that these students were either ready to be employed as secretaries or they were not, I sought and received the approval of the administration to issue only pass-fail grades. As I look back, I realize that I was, without being aware of it, moving toward competency-based instruction but I had not yet "put it all together."

Ah—Then Revolution. Probably the most potent step in my transformation—in that it brought about the greatest change in the shortest amount of time with the most noticeable results—was taken when I joined Burlington County College in Pemberton, New Jersey. Burlington was from its inception an experimental community college devoted to the use of a "systems approach to instruction."

One of the conditions of employment at Burlington was that new faculty members participate in a two-week preservice training session. In this short time, I was introduced to the mastery learning concepts of Bloom and Carroll, the elements of a systematic approach to instruction, and procedures for implementing these in the classroom. I also developed a course syllabus, wrote objectives, planned learning strategies and determined the evaluation measures for one of the courses I would be teaching that fall term. Since the preservice was structured to include some self-paced independent study, I also experienced for the first time some of the techniques my students would be exposed to in their classes.

That fall term, I was assigned a business math class—not a particular favorite for either instructors or students. Overwhelming numbers did poorly in what should have been an easy course. Although my first efforts at teaching the course followed conventional lines, I did produce several self-instruction units on the more difficult concepts. These were so well received by the students that I was encouraged to supplement more of the units with self-instructional packages. I continued in this fashion, dipping my toes into the water one package at a time, until eventually modules had been completed for each unit in the course.

The next fall, enrollments in the course mushroomed to more than two hundred students and what had been a wide spread of entry-level skills became even wider. I found myself spending the first few weeks of the term teaching basic math skills to some students while the more advanced students became disenchanted and bored.

The only feasible action was to assess students' entry ability in order to determine which, if any, prerequisite math units they needed to review, while offering advanced placement tests for students who

wished to challenge all or part of the course. I soon had students working simultaneously on virtually every unit in the course. Since there were so many students and they were proceeding at individual rates, evaluation became a constant process. Formative tests (self-checks) were completed in the math lab, and summative tests (final unit tests) were completed in a central testing center in the college and computer graded.

Almost overnight, I had a score of new activities for which none of my graduate methodology courses or previous experience had prepared me. Had it not been for the knowledge gained during the preservice training at Burlington and the assistance of an internal consultant (called an educational development officer) I would never have succeeded. As it was, by working nights and weekends I managed—most of the time—to stay one unit ahead of the fastest students.

Within two years, my teaching had undergone a revolution. It was no longer just me, my lesson plan, my lecture notes, and my confidential test file. My responsibilities now included the following:

1. Developing pretests to determine students' possession of entry-level prerequisites as well as their knowledge of objectives contained in later units.
2. Arranging for students who failed the pretest to enroll in the developmental math laboratory, establishing the necessary coordination with the lab, and monitoring student progress.
3. Developing specific, measurable objectives.
4. Developing or securing multitrack self-instructional materials for each unit of the course.
5. Preparing alternate versions of unit tests, arranging for them to be printed and delivered to the test center, and double-checking the computer's recording of students' test results.
6. Planning and supervising the work of a part-time, independent-study lab instructor and a student assistant and orienting clerks in the independent study and test centers to the course procedures.
7. Preparing and conducting weekly large-group lectures, conducting periodic small-group seminars, as well as providing individual tutoring as needed.
8. "Managing" the whole system to try to ascertain that it was working.

Thus, while working alone over a six-year period, my teaching had slowly undergone two or three changes through an evolutionary process, but with administrative support and encouragement at Burlington, my teaching underwent a revolution in two short years.

heartaches and accolades

However, no one undergoes a revolution without meeting some obstacles, and I had my share of heartaches. One of the biggest obstacles was the constant race with the clock. With a teaching load of three preparations and 300 students a term, my time was stretched thin. I can hear the notable management development personality Peter Drucker saying, "But, dear, you have all the time there is." Of course, he is right, and I think what I and others needed was some of his good management techniques because we had really become "managers of a learning environment."

Another major obstacle was my own lack of expertise. Since I had not fully experienced the teaching methods I was adopting, not had specific course work or training before the brief preservice and subsequent inservice workshops at Burlington, I made errors that otherwise would have been obvious and that often doubled the amount of work I had to correct. And, of course, none of the errors could be hidden. With so many students and what seemed like half the college noninstructional staff and paraprofessionals involved with my courses, any error I made became public record—often before I knew about it.

But I believe my greatest roadblocks emanated from the mixed blessings of administrative support. They had done a good job of setting an atmosphere within the college in which instructional innovation was expected, and they expended herculean effort in public appearances to help educate the community about the innovative nature of the college. Additionally, they spent at least nine hundred hours in devising a teaching load formula that attempted to take into account the unique activities necessary for instructional development. However, as I plunged ahead and was encouraged and rewarded for doing so, I became increasingly dependent on the staff at the college—and by direct correlation, I began to find limits to the staff support.

Shortly after I initiated my efforts to organize a multitrack audio-tutorial course, the educational development officer that I had come to depend on left the college and was not replaced for more than a year. I began to waste time and energy discovering by trial and error much that could have been learned in significantly less time with experienced help. When the college did replace the EDO, they employed someone with good academic credentials but no experience, with the result that I and many other faculty members ceased to utilize the office.

The college administration, even though far advanced in instructional philosophy over the majority of administrations I had known, seemed oblivious to the red tape one had to cut through in order to use

some of the services provided. For instance, we had one of the best LRCs (learning resource centers) in the country, with excellent duplicating and media-production facilities. Yet we encountered a lot of hassle in scheduling the graphic-arts, media-production and print-shop services, and procedures were changed often—sometimes in the middle of a term. In addition, some policies seemed incongruous. For example, duplicated materials could not be delivered. This meant that I constantly had to check to determine whether materials were ready and then, all 5'2" of me, had to haul 250 copies of a fifteen-page handout up the stairs and down a football-field-length corridor to the independent-study area.

Some of my biggest headaches and time wasters were due to noninstructional staff members, such as independent-study-area clerks who, apparently unaware of the critical nature of their roles in the college, would often misfile or lose materials and who would arbitrarily close up shop at a whim or for a coffee break. I experienced similar frustrations with clerk-typists who failed to proof their typing and who occasionally typed my directions to them as part of the copy.

A particularly bothersome problem was the apparent unwillingness to make major policy or procedure changes to facilitate faculty efforts at innovation. For example, we were encouraged to convert large-enrollment classes into continuous entry-exit courses, but the college registration system was not modified to help us. With all the headaches in attempting to hurdle the roadblocks, I was often tempted to regress—go back to the lecture approach, keep all of the students on the same unit at the same time, and do my own testing. Some of my cohorts did just that. One instructor became so frustrated with the red tape and mismanagement of the Test Center that he scheduled a large-group lecture and then used it to administer his tests.

More devastating were apparent administrative "retrenchments" as the college matured. An unfortunate example was in the area of faculty evaluation. During the first few years, the college witnessed a direct compatibility between the thrust for instructional development and the criteria for evaluating faculty. However, the longer range purpose of this marriage between mission and evaluation criteria was aborted when, quite suddenly—long after promotion data were submitted and decisions were to have been made—it was announced that the only criterion to be used for promotion that year was graduate credit! For many of us, the action effectively halted our movement toward instructional change and refocused our attention on the acquisition of graduate credits.

Another particularly disconcerting move was the increase in

the number of administrators being sandwiched between the faculty and the dean of instruction and the president. This bothered us in two ways: it made communication much more difficult and it represented an apparent contradiction in that while we labored to become more "productive," much of what we gained (which we had been told were to be used for support services) was being consumed by administrative salaries.

Also disturbing was an apparent dichotomy between the behavior expected of faculty and that of the administration. We were expected to write objectives so that we and our students might know where we were going; we were then to systematically examine alternative ways of getting there; and finally, we were to use the previously determined objectives to evaluate outcomes. Unfortunately, many of our administrators failed to establish objectives, rarely seemed to have considered alternative (and less costly) ways of achieving them, and seldom evaluated their actions.

The instances of this general hiatus between instructional mission and administrative procedures within the college are almost unending—and it should be remembered that this college is known to be one of the more innovative and progressive institutions. In the more traditional institutions in which I have worked and consulted, the problems are often magnified to grotesque proportions.

A final obstacle which should be mentioned was a growing smugness and self-satisfaction. The administration and faculty seemed to show disdain for any idea born elsewhere and took on the "if it isn't born in my own house . . ." syndrome. The results were fewer outside consultants, fewer visits to other institutions—and a growing overall feeling of complacency which helped to halt instructional change.

Yet despite all the frustrations encountered, I was encouraged and motivated by several factors to continue my pursuit of instructional change. One was the success of my students. Despite my groping and mistakes, more students were achieving the course objectives with greater mastery and doing it in a shorter time. In addition, more than 75 percent of all student evaluations continued to express a positive attitude toward the instructional changes being made. Overwhelmingly, they liked choosing their own method of study and progressing at their own rate. Another strong motivational factor was a noticeable increase in my take-home pay. Although I was meeting formal classes less frequently, my student load had increased to the point that my "overload pay" was significant. Additional accolades came in the form of favorable performance evaluations resulting in a promotion in rank.

I also had an opportunity to publish the self-instructional materials I had developed and was called on as a consultant to help faculty members in other colleges develop instructional materials. And still other benefits were the opportunities to present papers at national and regional conferences and at an international conference.

Thus, newfound success in helping students learn, an improved reputation in the field, and opportunities to publish and consult were outgrowths of my change efforts. Like many other faculty members, I was willing to do the work to make my institution as excellent as possible, but I wanted some recognition, reward, and support for my efforts—and I wanted to know the rules of the game before playing, not afterward.

When those elements were present, I was catapulted from gradual change into a revolution. Of course, an evolutionary process will produce change eventually, but as we learn from observing the Tasaday tribe recently discovered in the Philippines—a pocket of the Stone Age existing untouched by modern civilization—the evolutionary process can take an inordinate length of time. Can we afford to wait?

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A former chairperson with experience in two large community colleges "tells it like it is" as she offers suggestions on the chairperson's role in improving instruction.

the chairperson's role in promoting better teaching

wanda e. thomas

Because of their diverse student bodies and comprehensive goals and objectives, community colleges are necessarily concerned with achieving high-quality teaching and learning. Today, advancements in educational technology are providing a variety of media and techniques to help teachers reach that goal. However, most of the faculty members now working in community colleges are unfamiliar with their use, creating a need for faculty development. The success of any faculty development effort depends, in large part, on the general climate for change of an institution and, in particular, on the environment for change in the department or division. As the administrative head of these organizations, the chairperson's role in encouraging, assisting, and managing improved instruction is crucial. However, their task is complicated by a variety of factors, including their ambiguous role.

The department head is expected to be the academic leader, personnel manager, resource allocator, and manager of new programs. In some respects, the chairperson's role can be compared to that of a blue-collar foreman in a plant. Both jobs are difficult, but at least the

foreman usually has a well-defined job description, while the chairperson has none or, at best, a description that is so vague or so all encompassing as to be of little use. In addition, the department head usually finds himself or herself pulled in different directions by students, colleagues, and administrators. Students want more relevant courses and accessible faculty members; faculty demand more pay, reduced work loads, more equipment and travel funds; and administrators want every penny accounted for and are constantly developing new rules that limit the options and flexibility of the chairperson. Further, in more and more colleges, an already difficult position is made almost impossible by restrictions contained in negotiated contracts—over which the chairperson has little say and which often fail to define whether he belongs to "management" or "labor." Simultaneously, he is expected to represent the department members' points of view and keep the administration happy. His typical work day is devoted to endless administrative activities which he is expected to coordinate, negotiate, or facilitate. Yet, at best, the chairperson is trained in a particular discipline, has had no preservice training in administrative matters, and probably little inservice training either. It's no wonder that the end of many days often finds him feeling frustrated, useless, and powerless.

And on top of all that, administrators who desire innovation and experimentation expect chairpersons to function as chief motivators and pace-setters for instructional change in their departments. Yet these same administrators never seem to realize the financial support required for such an effort, especially support for the development of faculty members and chairpersons. It is well known that teachers are not fluent in innovative methods, but why should anyone expect that we department heads, only temporarily displaced from classrooms, are any more knowing? The mere assumption of an administrative title does not simultaneously increase knowledge.

process of change

Thus, if instructional change is to occur, the first step must necessarily be a development program that not only exposes both groups to new and different approaches but also helps them acquire the skills needed to incorporate these methods in the classroom. Such a program can combine on-campus seminars, visits to other colleges, and a carefully selected reading list. To get started, the program should involve enough faculty members to make the change credible but shooting for

100 percent is destined for failure. Besides, what institution could provide the media support for a whole faculty of innovators?

Planning is the next step. Once its members have been exposed to innovative methods, the department should formulate tentative long- and short-term objectives for improving instruction and each new idea they develop should be related in some way to these aims. Then, with both goals and proposals in hand, the chairperson can show the administration how each new program or idea will help to attainment the ultimate objectives. Naturally, departmental goals should be consistent with those of the college—if they exist.

Once departmental objectives are developed, programs should be "costed out"; that is, the number and kind of personnel, facilities, equipment, and supplies needed should be defined and priced. A proposal should never be submitted to a dean without budget figures. The chairperson must be prepared to provide information on such variables as: the number and kinds of students who will benefit from each project, the type of facility required to implement the program, and the initial cost of producing the program, as well as the cost of maintaining it. In addition, the department head must anticipate the impact that each project will have on other areas of the college, such as audiovisual services. This kind of planning is crucial, because after a faculty colleague has spent countless hours developing self-paced modules, he will look to his chairperson to cut the administrative red tape so that the program can get underway. And the chairperson can save later time and frustration by making sure administrators are aware of what they are saying "yes" to.

As soon as an "ideal" plan has been developed and the cost of implementation determined, the process of securing approval begins. The chairperson must be prepared to compromise or propose alternatives, since instructional development is not an exact science, and there are often numerous ways of achieving the same results. Quite often an initial "no" can be changed to a "yes" by going back again—with a new approach.

The effectiveness of a flexible approach was demonstrated at our institution when a number of departments began using self-instructional, audiotutorial methods that required carrels, an open space to put them in, additional personnel, and so on. Initially, each department wanted its own facility, but because of budgetary limitations this proposal received a "no" and faculty immediately became discouraged. Yet by consolidating all of the programs in one learning center, facili-

ties, equipment, and personnel costs were greatly reduced and the project was funded.

Impact of innovations

I would give a false impression if I suggested that this process is smooth or that it ends when a proposal is approved. Once a faculty member has attempted an instructional change, the department head has assisted him, and so on, then a new group of problems arises and has to be solved. Every day brings a new one, so any attempt to discuss them all would be fruitless. But let me comment on a few of the ones that are most likely to occur. One of the first problems is fear. The more traditional faculty members will be threatened by any new media. Feelings that the audiovisual equipment will replace them are often evident. I have always dealt with such concerns with the following statement: "I am sure when the first book was published, all educators felt that books would soon replace the need for teachers. Hundreds of years have passed and no book has taken the place of a teacher, and neither will audiotutorial methods."

For faculty members using nontraditional approaches, the conventional semester-contact-hour load formula based on standardized fifty-minute lectures will create real problems—which must be solved if teachers are to continue to experiment. The chairperson must negotiate with the upper administration an acceptable arrangement, even if it is only on a trial basis. Here again, countless hours of discussion can be avoided if the department head has initially anticipated the need for such a restructuring and has prepared the administration for it.

One of the most common difficulties arising from self-paced courses is that of students who do not complete a course. Does one give them an "I," a "W," or perhaps an "X"? Unless the problem is resolved, the faculty member's student load will continue to grow to an impossible level as new students are added to old ones. In most cases, the failure of students to complete self-paced courses can be reduced to a workable level through the early use of cut-off dates and by the judicious employment of both formative and summative evaluation.

Still another effect of using nontraditional teaching modes is a great increase in the demand for supportive services. The audiovisual department will no longer just dispense equipment and materials but will now be involved in producing a variety of instructional materials. Jumping on the media bandwagon is tempting, but each instructor should keep in mind that there is no one best method or medium for

meeting a particular objective. The final selection must be based on some practical considerations—how many students need to use the materials; how much space is required; how much supervision is necessary, and so on. In most instances cost becomes the deciding factor in choosing the types of media to be used. In my own experience I have found that the cost can be minimized by (1) consolidating equipment in one area to which all disciplines have access; (2) developing media presentations that will not require "new" capital expenditures; and (3) selling self-instructional packets at the college bookstore.

As an example of what can be done, at Allegheny we started our Learning Center with only five hundred dollars. To do this, we dismantled the Language Lab and, using equipment from the lab, our maintenance crew built carrels for us. This remodeling allowed us to put the language lab, A-V department and reading lab in one location—with space left over for other services. By making the best use of equipment, space, and supportive personnel, we got our Learning Center—without thousands of "new" dollars.

One constraint on innovation that has received little attention is collective bargaining. An administration may want to make exceptions in individual cases to encourage experimentation, but if a contract exists, the administrator's hands are often tied and he fears "precedent setting"; individual faculty members are similarly concerned about precedent setting and are often hesitant to do more than what is considered "normal" teaching without some form of compensation—either a reduced teaching load at some time or more money. Into this stalemate walks the chairperson—pulled by the one side toward instructional change and by the other side toward maintenance of the status quo. Without authority or budget, he has little chance of arbitrating the matter. Although he may try anyway, this is not the kind of predictable action one incorporates in pre-specified measurable management objectives ("MBO"). One solution to this problem for my college has been to fund competitive curriculum-development projects in the summer.

The foregoing suggestions are just a few of the ways to facilitate instructional change that have worked at our institution. What works at one college may not necessarily fit at another, but in most cases the chairperson can reduce both the number and magnitude of potential problems by good planning, by communicating and coordinating, by keeping departmental and institutional goals in focus—and above all, by being prepared to compromise and propose alternative methods.

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A dean of a small but highly innovative college recounts some of his experiences.

a dean's experience with instructional change

dan n. stallings

Established in 1966, Caldwell Community College, like most community colleges, has been committed to good instruction since it opened its doors. However, Caldwell, again like its peers, soon found that "good" instruction defined as a traditional lecture-textbook approach simply did not work for the majority of the students who enrolled. The failure of this approach was first made evident by the high attrition rate we experienced shortly after the beginning of the institution. Our students were simply not doing well in traditionally taught courses. The need for change was also pointed out by studies revealing a lack of reading skills and by an apparent lack of "motivation"—factors that have since been described in the literature related to nontraditional students. Admittedly, our problems were not unique, but unlike some other institutions, we have been able to accomplish significant change with some very rewarding results.

Although the reasons for our success are many, several key factors have been:

(1) a board policy encouraging instructional change;
(2) an effective plan for participation in decision making;
(3) good communications within the college;

(4) careful selection of the faculty;

(5) a well-planned preservice program for new part-time and full-time faculty members;

(6) the appointment of a dean of institutional development who is responsible for staffing and equipping a resource center with both professional and paraprofessional staff people and media to assist instructors in their efforts to improve teaching;

(7) the provision of funds to provide release time for instructors who wish to develop innovative methods for the classroom; and

(8) the success of our grants program. (We have received more than $250,000 in the past five years from grants—most of which have gone directly into improving instruction.)

For us, the most effective instructional changes have been initiated by the faculty. We learned this truth the hard way when the administration's first efforts failed. This attempt was made after several other administrators and I attended a workshop on measurable behavioral objectives in Washington, D.C.; we returned to campus full of zeal and tried to get all the instructors to establish and use such objectives. To speed up the process we even brought in consultants to conduct workshops. To put it mildly, the idea didn't "take."

This lesson learned, we began a slower program of change—and, it turned out, a very successful one. Its major feature is a professional development committee composed primarily of faculty members whose responsibility is to plan, conduct, and evaluate our instructional development program. As a result of their recommendations, one day in each quarter is set aside for professional development. Each department develops a plan for inservice education and makes its presentation to the professional development committee for the designated day. During the five years this plan has been in effect, departments have used the time to good advantage. For example, the Allied Health Department made visits to other institutions and then worked together to plan a career-ladder associate-degree nursing program which now allows the licensed practical nurse to enroll and complete the requirements for the R.N. in one year.

As the faculty development program gained momentum, and additional teachers became involved, funding became a problem. Our efforts received a considerable boost when a group of fourteen community colleges and technical institutes in western North Carolina which had teamed with Appalachian State University received a grant for staff development. One of our most innovative instructional changes came about as a result of this grant. Two instructors who were funded to

attend a 1972 workshop on Cognitive Style Mapping came back and reported to the entire faculty on what they had observed at Oakland Community College (Michigan). Several of the staff members were quite interested, and when the workshop was offered the next year, others requested funds from the professional development committee to learn more about Cognitive Style Mapping. In view of the amount of interest in it, we decided to bring the consultants to our campus so everyone might gain information about the program. Approximately 40 individuals volunteered to participate in a workshop to be held on a Saturday and Sunday. After attending the workshop several faculty members indicated a desire to use Cognitive Style Mapping, specifically in accounting, English, and sociology. To facilitate this application, the English and sociology instructors were given release time to develop curricular materials, while the accounting instructors found several courses already individualized that could be adapted to their use at Caldwell. At present, these represent only a few of the more successful courses that have been adapted to match the cognitive style of students with the instructional modes of our faculty.

These same funds provided the means for our biology instructor to attend a workshop on using measurable behavioral objectives in biology. After his return he planned an extensive individualized program for his biology class. We assisted him by again providing release time so that he could implement his ideas.

Change has not always been from "scratch." In some cases, we've merely modified materials that faculty members at other institutions had prepared. For example, our entire industrial department paid a visit to an institution that had individualized programs in several areas. While there, the air conditioning and automotive instructors obtained individualized materials and, upon their return, proceeded to modify and use these aids. Once again, the college provided release time and furnished consultant assistance to help them develop some of the software for the programs.

We currently have two grants for the improvement of instruction. A developmental studies project is funded by a Kellogg Foundation grant to a consortium of fourteen community colleges and Appalachian State University. This grant is intended to stimulate the participants to develop meaningful programs for dealing with students who are not prepared to enter regular courses. At our college, it provides matching funds over a three-year period for a director and release time for math and English instructors to develop approaches and appropriate materials.

The other grant involves Caldwell Community College and Technical Institute along with nine other community colleges and technical institutes in a statewide project whose goal is to find ways of extending learning opportunities to a larger portion of the population by providing them at locations and times convenient to the learners. This project anticipates that current technology may provide a vehicle for the transmission of educational and health materials to rural areas of North Carolina via traditional TV broadcast, current and expanded cable TV coverage, and eventually space satellites of the ATS-6 variety.

Phase I of this project, to be completed by June 30, 1977, consists of the development of sixty instructional modules, thirty minutes in length. Each institution in the project has the responsibility for developing six. The completed modules will be shared with the other institutions in the system at the completion of Phase I. The intent of Phase I is to launch a materials-production program, provide for staff development, and test a model of development and cooperation with ten institutions in North Carolina.

The total results of these efforts are significant. At the present time, all of our forty-two full-time faculty members have had some professional development and more than half have at least one course that is individualized. Six out of eight of our one-year occupational programs have been revised so that students may enter at any time. Although much of the evidence of our success is intuitive, there is concrete evidence, too. For instance: our attrition rate is down from 30 percent to about 11 percent in the freshman year; our enrollment has increased about 15 percent faster than the state and national average; a recent survey indicates that 90 percent of our local employers are satisfied with our graduates (some 80 percent of all our graduates are employed within twenty-five miles of the college); and we have an unusually low attrition rate among our faculty and staff members. But perhaps the most rewarding result is the response of our students. One recent comment sums it up well: "the faculty here really gives a damn about us."

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Today's president can have little direct impact on instruction, but he should be active in creating a supportive environment for effective instruction.

the president's involvement in instruction

thomas m. hatfield

Instruction is not disconnected from the rest of the institution; in fact, it is potentially related to everything else. So any organizational change that enhances instruction is an incredibly complex social process replete with camouflaged obstacles and trip wires. Nevertheless, such change must be attempted, because effective instruction is the *raison d'être* of the community college, and the number of units of instruction delivered is the usual basis on which colleges receive funding from students and government. Politically speaking, by emphasizing instruction, community colleges have struck the state universities, their great competitors for public money, in their Achilles heels in a way that state legislators understand. Thus, for substantive as well as procedural reasons, effective, adaptable instruction which enables a diverse student population to solve its problems, obtain credentials and achieve other forms of personal fulfillment is, and must remain, the bedrock of the community college.

The direct role of the community college president in influencing instruction is often exaggerated. In fact, some presidents who followed the suggestions in the literature retired prematurely, particularly when

the methods recommended and followed highlighted the president in an authoritarian or punitive stance. An experienced president knows the pragmatic limitations of his effectiveness in increasing student learning. It is usually only the uninitiated newcomer or the old-timer driven to the edge of psychosis who believes he can do a great deal, for as S. Suzuki, Buddhism's great interpreter to the West, once said, "In the mind of the beginner, the possibilities are infinite. In the mind of the expert, they are few."

It is a fact that some of the best instruction and some of the most positive changes occur without the knowledge or support of the president. Furthermore, the limited ability of the president to promote better teaching methods is diminishing because of the prevalent challenge to authority, the development of closer relationships between governing board members and other college constituents, and the emergence of contracts limiting the flexibility of presidents and governing boards.

The principal reason for the decline in the president's influence is that nowadays everywhere in our society people are more assertive, better educated, more knowledgeable, and more contentious. They not only know their rights, they know their privileges. Knowledgeable and responsible individuals often perceive behavior necessary to fulfill college-wide responsibilities as undue infringements on personal freedom. The president, the balancer of individual and group interest, is caught in the middle unless individuals' consciousness can be raised to coincide with group interest. An individual serving the group's interest may simply be serving enlightened self-interest.

A community college with assertive, knowledgeable, and contentious personalities is a lively place to be, but it is not a place where the president can say "Thou shalt," and they will. As Bushnell wrote in 1973, "Faculty, students and community groups will no longer sit passively while their destinies are shaped for them" (p. 129).

The most important instructional change, therefore, comes about in relationship to other changes that occur within the institution. The president who does not neglect instruction but who provides distinguished organizational leadership, in contrast to focusing on instructional leadership, will usually find instruction improving. Even without mandating instructional change, the president can help to create a setting that supports, encourages, and rewards the faculty member who initiates and maintains positive instructional change.

My non-Protestant friends notwithstanding, the historical analogy of Martin Luther may be instructive to the president who would lead his institution toward significant instructional change. In a vigor-

ous demonstration of leadership, Luther cried "Here I stand" and nailed his theses (substitute some hallowed tenets of student learning) on the church door in Wittenberg. His call precipitated such tremendous activity by those disenchanted with the practices of the prevailing order that the old order crumbled. Unfortunately, Luther and his colleagues had not provided a new order—an organization, with all that implies—for the new converts. The result was strife, bloodshed, fragmentation, and bitter division. It became so difficult for those empowered to govern that Luther was moved to partially recant his earlier position. The lesson is obvious: preparing an organization for significant change involves more than a few workshops and counsel from learned friends, and more than oratory, however effectively delivered and profound it may be. Such preparation requires detailed and extended attention to new organizational processes, to structures for decision making, to physical arrangements, and to psychological conditioning.

The president has significant handicaps in creating the organizational setting in which high-quality instruction may flourish. The psychiatrist has a well-grounded theory to guide his efforts to improve his patients' mental health; the teacher may follow behaviorist patterns, and the civil engineer has a proven body of research and theory to rely on. Unfortunately, the president has no theory and little research to give structure to his work. What exist are some tested methods for implementing basic institutional functions, folklore from colleagues, a few worthy suggestions in the literature, and personal intuition.

Before embarking on significant instructional innovation, one must be sure all essential functions (and some nonessential ones that will make life more convenient) are well discharged. The president should take care of institutional housekeeping needs and build an institution with strong supporting services.

A major lesson from the "one-new-community-college-a-week" period of the 1960s is that unless a strong basic college exists before the institution undertakes extensive innovation, the innovation is probably doomed to failure. When paychecks are late, enthusiasm for almost any institutional activity cannot be sustained. Ineffective financial controls or business management ineptitude have tarnished many reputations and ended careers (no matter the president's commitment to instruction; if he is out of office, his commitment is for naught). Policy voids lead to indirection and lack of confidence in the top leadership. Communication failures always occur, but are more likely to in a period of change unless good links have been firmly established beforehand.

The president bears a responsibility to secure the resources to operate the institution, a responsibility which often exceeds that of the governing board. In the past, many presidents who have been regarded as "successful" have been those with funds sufficient to accede to most reasonable requests from college constituents. Discontent could be "bought off." Perennially increasing enrollments obscured administrative errors. Although tighter budgets for community colleges in most states now deny presidents the ability to buy their way, the president still must make sure that resources are adequate to operate the institution and to satisfy his constituents. Innovative cost-effective measures are a must, but presidential action which moderates and possibly lowers the expectations of members of the college community may be the magic that avoids demoralization and financial ruin and enables the institution to thrive.

The president's style and rhetoric have an important impact on this phenomenon of high and rising expectations so characteristic of our society. If the president behaves in accordance with the national myth of virtually limitless resources and feeds the rising expectations, he can expect the gap between budget requests and available income to increase. Likewise, the institutional sense of deprivation and frustration will increase. On the other hand, the president can convey by deed and word to the college community the limits of the institution's capability and perhaps attenuate the expectations. Nonetheless, the prospect of stable or declining purchasing power being chased by expanding institutional needs and wishes does not augur calm presidencies in the foreseeable future.

Historically, community colleges have been administrators' colleges, but the number of presidents who operate solo style is rapidly diminishing. It is plausible that when faculty members, the real implementers of instructional change, can identify with policies affecting them, they may pursue their tasks with great alacrity. Welfare policies and instructional policies are of paramount concern. Thus, one of the greatest challenges to the president is assuring that an organizational structure is created and maintained that provides for effective consultation with the faculty as well as with other groups of the college constituency.

The president has no set procedure to follow in creating his system for obtaining information from all constituent groups. A desirable system contributes to institutional problem-anticipation (and solving) and enhances the influence of students, those oft-overlooked consumer citizens whose average age is now 29 in the community college. The

consultative system which enfranchises college constituencies can also provide the valuable qualities of creative tension and predictability for the organization.

Gone are the days when one-way communication will be tolerated, either in homes, government, or colleges. Discussion and sharing of information are part of the process of intelligent analysis. The college president who cannot provide a means of consultation with faculty members, students, and other administrators, will find it imposed upon him.

A preoccupation with democratic governance and other concerns of the whole institution does not mean that the president isn't involved in instruction. He should continuously ask questions about the results of instruction, publicly and privately. Key issues should be discussed and scheduled on the agenda of the college governing board. Here are some examples: What are the characteristics of students entering the college? What are their in-college success rates and what do follow-up studies show about their success as graduates? What is indicated by student evaluations of instruction? What are the results of surveys of employers of students? To what extent are the differing learning rates and information levels of students accommodated in college instruction?

Discussing instruction with faculty members—listening to teachers—is a good way for the president to learn what the institution needs to provide in order to support instructional improvement. Some samples compiled by James O. Hammons, the editor of this issue, include these:

1. Knowledgeable administrators who are informed about curent practices in systematic instruction.
2. Counselors who understand systematic instruction and can explain it to students.
3. An environment receptive to creativity.
4. Flexible registration procedures allowing nontraditional class schedules.
5. At least one other faculty member to work with who has similar interests in instructional development.
6. Adequate audiovisual equipment and supplies.
7. Location for independent study by students in which print and nonprint materials may be placed.
8. Release time to prepare systematic instructional materials.
9. Summer fellowships for instructional development.
10. Merit recognition of instructional development.

11. Assurance about teaching assignments so that faculty members can concentrate on preparing for them.

12. Flexible learning spaces for students.

13. An institutional copyright policy which allows the faculty member to share the monetary rewards from the sale of published instructional materials.

14. A competent person to provide assistance on campus .

15. Adequate typing and duplication service.

16. Employment of instructional assistants or other paraprofessionals.

17. Assistance in identifying and evaluating commercially produced instructional material.

18. An orientation program for students.

19. A faculty library with books and materials about systematic instruction.

20. An office environment conducive to work.

21. A faculty evaluation system with relevant criteria.

22. Interest by chairperson, dean, and president.

Dogmatic institutional approaches to instruction are about as likely to succeed as a fat man on a crash diet. Teaching, like other kinds of human activity, is affected by fads, as we surely saw in 1976 when a candidate for president of the United States endorsed individualized instruction. Would that he had indicated whether he is a behaviorist, humanist, or personalist! Human beings are complex, and for all the research, we do not know exactly how learning occurs. Therefore, an eclectic approach to instruction deserves support. Inherent in one's support of such an approach is a willingness to accept that some new methods may fail and that some proposals for instructional development may have to be denied. When faculty members know that support will not be withdrawn at critical times during the development process, they can better work through intricate teaching problems with a fail-safe security. Freedom to experiment with different kinds of instructional modes to meet the varying needs of a student body as diverse as America itself is an important component of a community college for its faculty.

The community college president has the responsibility to provide an organizational setting in which students may learn our society. Although we have abandoned with a sense of good riddance the old credo that teachers teach, administrators administer and students study, the community college president who seeks instructional change without addressing the total organization will experience unnecessary difficulty and disappointment.

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Thomas M. Hatfield was the founding president of John Tyler Community College (Virginia) and the Austin Community College (Texas). He is a former state director of community junior colleges in Texas. He earned a doctorate in community college leadership at the University of Texas in Austin, was a postdoctoral fellow in higher education at the University of California at Los Angeles, and is currently dean of continuing education at the University of Texas in Austin.

The chairman of the board of trustees of one of the nation's most innovative community colleges shares his perception of instructional change.

a trustee's role in changing instruction

malcolm pennypacker

Let me state at the outset that my knowledge and experience on the topic of this monograph are limited to that gained over the past ten years as a board member, vice-chairman, and finally chairman of the board of one community college—Burlington Community College in Pemberton, New Jersey. With that disclaimer, let me say that Burlington has been, and continues to be, characterized by instructional change. Well before the first students enrolled in 1969, the planners decided that the primary goal of the college would be to encourage innovation and experimentation aimed at providing the best possible teaching-learning experiences for the citizens of Burlington County. Let me also say that although we feel we have made significant progress toward this goal, we have not yet arrived (and we probably never will). We've had our success and our failures, but the net result has been overwhelmingly positive.

Our goal of encouraging innovation and experimentation served as the basis for selecting a president and dean, developing educational specifications for our college facilities, and recruiting the faculty; it also led eventually to the adoption of an institutional philosophy that we

at Burlington call the systematic approach to instruction. In this article I want briefly to review how the decision to pursue a nontraditional approach to teaching evolved and some of the actions we as trustees took to contribute to what I believe is our success in instructional change.

why be nontraditional?

Trustees are generally laypersons with varied educational backgrounds who represent a wide spectrum of business affiliation. With the exception of the county superintendent of schools (his membership on the board is mandated by state law), we at Burlington were not unlike any other board in that we required, in other to formulate a philosophy and objectives for the college, the assistance of a professional staff, especially the president and the dean. This joint effort resulted in the adoption of a policy dedicated—among other things—to providing educational programs that would be flexible, creative, and dynamic; the pursuit of excellence in both teaching and learning was considered an integral part of that philosophy.

It may well be asked, Why all the emphasis on learning and innovation and experimentation? Following the traditional methods would have been much less hassle and there were certainly plenty of precedents and examples to use as guides. Yet for essentially three reasons we felt that our new college, one of thirteen then being established in New Jersey, should be different: (1) the changing times; (2) the nature of the students we expected to serve; and (3) public opinion.

In 1967–1968 we were quite aware of the changes occurring in our society and the rapidity with which they were occurring. Although none of us knew where these changes were leading, we knew that building a college designed for the past just did not make any sense. We wanted to build a college that incorporated the best that was then known about teaching-learning and one that would be flexible enough to adapt to developments which were still "down the pike."

Further, since each board member was a county resident and most of us had lived in Burlington County for a number of years, we knew the county and its people. We knew our students would vary widely in age, ability, and socioeconomic background. We also knew there were virtually thousands of young and middle-aged graduates of New Jersey high schools who had been unable either to enroll in one of the few state-supported four-year colleges or to afford to go out of state. And we knew the manpower needs of the hundreds of businesses and industries in our area. It just didn't make sense to us to plan

a college for a homogenous group of traditional college-bound teenagers when our expected student body would include large numbers of older students, culturally deprived students, and fully employed persons who would be attending classes part time.

Also, as we "read" our area, public opinion seemed to be tending more and more toward responsible change. Not everyone felt that way—many people we knew were quite satisfied with the status quo. However, we felt that the majority was in favor of change—not change for its own sake, but change that made sense. We realized that the effectiveness of the proposals we were advocating would have to be proven, especially those that might appear to be "frills" or more expensive than more familiar approaches.

facilitating actions

As I look back, I recall that although the charter board members differed on many aspects of our tasks, we all agreed on one thing—the selection of a proper president was our first and most important order of business. Because we were familiar with the results of a very thorough feasibility study, we had a general knowledge of what a community college was; however, none of us pretended to have any definite ideas regarding what instructional approaches would be appropriate. Like many modern-day politicians, we were much surer about what was wrong than we were about what should be done. We needed an educational leader for a president. And as the past ten years have shown, we fortunately found such a person, a president who, with the assistance of his dean and other key staff members, has been able to chart our direction.

I'm sure that much of our success has been due to the more than one year of lead time that the president and dean had to plan together before the first students were admitted. It was during this time that much of the groundwork for our innovative learning system was laid. This planning included a very comprehensive set of educational specifications which were to be the blueprint for building construction—and the design for a systems approach to learning. Our new campus had to match our educational plan.

Traditionally, a lay board of trustees in this position would review educational specifications and approve architects' drawings which featured classrooms and lecture halls. However, we were determined not to be traditional—so what then? Flexibility was absolutely necessary. To meet that requirement, we asked the president to visit colleges

known for innovation and experimentation in instruction. Our board chairman accompanied him on several of these trips, and from his narratives, those of the president, and the slides taken on the trips we began to better understand the kinds of facilities that would be needed to house the instructional approach we envisioned. During this time we also realized that technological aids would be a necessity, not a luxury—and that eventually, as more of our classes became self-paced, we would require a computer capacity far in excess of what a college our size could normally justify. As a trustee confronted with decisions requiring a choice between building 20–40 station classrooms and building mostly laboratories, large-group instruction facilities, and audiovisual study centers for individualized instruction, I sometimes wished I were somewhere else.

And such choices were just the beginning. Having selected a president and approved the educational specifications, we, together with the president and his key staff members, now had to prepare the community for our various departures from the norm. Thus began a round of presentations at civic groups, clubs, and other organizations which later caused the dean to say that there was not an organized group of more than five persons to which one of us had not presented our plans for the college.

Another major task of the board then, and throughout the history of the college, was to approve several policies, personnel actions, and budget items which, although at times unprecedented, were thought to be quite essential to our goal. Just a sampling of these include: policies (and funds) for summer faculty fellowships to support curriculum development; a rather definitive faculty evaluation plan based on clearly defined criteria; a very nontraditional faculty load system; a copyright policy encouraging the faculty to produce curricular materials with commercial appeal; and generous travel funds so that faculty and staff members might visit other "islands of innovation." Several of the policies we approved were "pacesetters" (at least for New Jersey). One of these was designed to facilitate differentiated staffing. As some of the teachers developed self-instructional materials, we found it to be both economical and more effective to employ less expensive instructional assistants to staff newly created independent learning centers. A second action approved (in 1969) was the appointment of two assistants in the dean's office. One slot was for an educational development officer whose task was to train and assist new and existing full- and part-time faculty members in the use of the systems approach. The second assistant was an educational research officer

whose major function was to assist faculty in evaluating the results of their instructional innovations.

Budget time was also an interesting experience. We quickly discovered that normal guidelines from other colleges just didn't fit our situation. Our computer costs, for example, were substantially larger than those of other colleges of our size, and I still remember discussing the budget requests for print shop equipment which, we later found, gave us the best offset printing capacity outside of Philadelphia—but both the computer and the print shop were vital to the success of our instructional program.

I review this list primarily to show the ways in which a board can promote instructional change. Board meetings often went long into the night as we sought to better understand why a particular policy, position, or budget item was needed. However, once convinced, we stood ready to defend it (and often had to).

conclusion

Once the direction was set, a staff was recruited, buildings were built, and so on, we as trustees found that our role had changed: now we were evaluators and facilitators of progress. We also found that we had a responsibility for educating new members to the board. And to some degree, we performed the same function for each new board of freeholders (the county governing group in New Jersey). The latter group is especially important, since the major portion of college income comes from the freeholders.

A step beyond the freeholders was the community served. This included our students, but those who were not students also needed to be well enough informed to have a positive rather than a negative attitude. New concepts, new approaches to anything are likely to trigger opposition unless one can show that their implementation is actually effective. There always will be those that cannot be convinced that the traditional classroom methods may not be the best. Although an effective public relations program smoothed the way at first, we found that a continuing effort was required. New faces appeared, attitudes changed, and we had to keep educating.

Even an educator can become overwhelmed by the normal daily functions within an innovative college, and for a lay trustee the confrontation is even worse. Things such as instructional objectives, evaluation of the attainment of such objectives, discussions of various instructional modes, computer-assisted instruction—all these can be mindboggling.

However, a new concept such as the systems approach to instruction and learning which incorporates these various elements in an integrated approach can also offer a fascinating view to the trustee of the college and the program for which he bears responsibility.

Changing the instructional approach has not eliminated the problems normally inherent in an educational institution. For example, collective bargaining entered the scene early and has been complicated by tensions over a work load admittedly heavier than the average because of the demands of the system. And there are the inevitable crises when a faculty member's contract is not renewed, and so it goes. However, to be a part of such decisions and then to observe the results over the years has been, at least for me, a most satisfying experience.

A charter member of the board of trustees of Burlington Community College, Malcolm Pennypacker became chairman of that group in 1974. He has also been involved at the national level in the Association of Community College Trustees, serving from 1973 to 1975 as a vice-president and in 1975–1976 as president. In "real life" he is an assistant vice president of the Fidelity Bank of Philadelphia.

Two consultants who have assisted many community colleges describe the current roles of consultants and effective ways to use this resource.

using consultants to improve instruction

james o. hammons
walter hunter

Significant changes have occurred in the community colleges, especially during the past ten years. An analysis of these changes reveals several significant contributing factors. Foremost, of course, has been the rapid growth rate of the colleges, which not only permitted, but perhaps encouraged, change. Second, a small but growing number of educators associated with two-year colleges have been willing to risk reputations to try new approaches. Third, external money to support change has been available from federal, state, and private sources. And finally, a number of external consultants or "change agents" have been available to help initiate, accelerate, and guide the improvement of instruction. This article focuses on the role of these individuals—many of whom were early faculty "innovators"—and suggests several guidelines for their effective use.

The functions of consultants to community colleges have changed significantly since 1960. When the enrollment boom was beginning, their major task was to help institutions serve all the students who wanted to enter. In most instances that meant helping new colleges get

New Directions for Community Colleges, 17, Spring 1977. 27

started by conducting feasibility studies, determining program needs, and developing organizational charts. Consultants also assisted the development of master plans for new campuses and wrote educational specifications for new buildings. In 1977, consultants have quite a different role. Their primary job is to help administrators improve the quality of their institutions through such programs as long-range planning, management by objectives, staff development, cost-benefit analyses, problem-solving, and evaluation. Additionally, one of the major contributions of the external consultant in recent years has been to assist efforts to improve the quality of the teaching-learning process.

consultants' roles

The specific functions a consultant can perform in efforts to improve instruction vary widely. A look at several of the more common ones shows that they run the gamut of the change process.

Planner. Effective change does not "just" occur. It requires a great deal of planning, especially with regard to such requirements as support systems, personnel, equipment, software, and space. External consultants, because of their wide experience and presumably unbiased outlook, are often very instrumental in helping an institution plan changes in teaching methods.

Timer. The timing of an instructional-change effort is critical. Administrators who are too close to the situation often fail to recognize that certain times are inappropriate for undertaking such an endeavor. An experienced, observant outsider who is sensitive to a campus climate can assess the situation and offer recommendations.

Catalyst. Getting things started or furnishing the missing ingredient needed for change is both a legitimate and a traditional role of the outside consultant. Thus, consultants may be used to "plant seeds" in the form of new ideas or to recommend "fertilizers," such as needed training, support services, and reinforcement.

Salesman. Often what is needed to initiate change is a real "ball of fire," a person who, by the sheer eloquence and vivacity of his presentation, can cause previously resistant faculty members and administrators to become receptive to change. This is a very specialized role which only a few consultants are equipped to play. It should not be confused with the more general catalyst function, which considerably more consultants can fulfill.

Trainer. This is easily the most common role of consultants in instructional change. Unfortunately, most consultants are used pri-

marily for "one-shot" presentations. The impact of these can be compared to the effect of a diver on a swimming pool—a graceful entry followed, momentarily, by a few waves splashing at the edge of the pool and a few interference patterns on the surface. However, the pool soon returns to its "natural" state and no trace of the diver remains except for a few drops of water on the deck, which quickly dry and disappear. For training to be effective, it must be long enough to allow the participants to assimilate basic concepts before progressing to more difficult activities. Additionally, administrators (especially chairpersons, deans, and presidents) and support personnel (in the learning resource center, the computer services division, and the counseling office) should be involved along with the faculty if the change is to have long-range success. And finally, the training must be sufficiently complete to allow the institution to then operate on its own, with the aid of its own internal consultant(s). Research and experience—particularly in the field of management and organizational development—clearly indicate that qualified persons who are credible to the faculty and staff and who can provide day-to-day assistance to the staff once the external consultant has gone are extremely important to institutionalizing the changes sought. The training of internal persons to serve as trainers—a task which only a few consultants are qualified to do—is one of the best ways of investing consultant dollars.

Manager. Once a change effort has been initiated, the task has only begun. An institution in a state of change, like a chemical reaction under way, is very volatile. The advice of a knowledgeable, experienced consultant during this state can be essential to the success of the undertaking. For example, determining when to hold in abeyance or to introduce the next element or predicting when massive infusions of reinforcement are needed are vitally important decisions a consultant can often make.

Troubleshooter. Whether the task is identifying the problem or helping to find solutions, external agents are ideally suited to this function in that they possess a wider range of experience as a result of their consulting activities and are usually more objective, since they have no vested interest in the institution.

Evaluator. Either as an evaluator or as an assistant in the development of an evaluation plan, an external agent often brings new, unbiased perspectives and is more likely to ask questions internal staff members would not ask. Also, since an evaluation project often constitutes a single event, experienced persons outside the institution are able to design, implement, and conduct research in a relatively shorter

period of time and at a lower cost than can the internal staff, which would have to "gear up" to do the task.

who, when, and how

Who are they? Persons serving in consultant capacities are, of necessity, from backgrounds as varied as the roles they fill. The following profiles are most typical:

- Faculty members who, because of some success in their experimentation with classroom processes or materials, find themselves in demand as consultants to other colleges.
- Administrators from "innovative" colleges who share their experiences with other colleges.
- University professors who help disseminate information about new developments in instruction, educational management, and evaluation or who help to identify and fill the research gaps in certain areas.
- "Professional facilitators"—the people who make their living consulting.

When Should They Be Used? Unfortunately, there is no list of "seven deadly signs" to help an administrator determine when to seek the advice and assistance of a consultant. There are, however, a number of general situations in which a consultant can be invaluable. For example, utilizing an outside person is an obvious move when the internal staff is too close to the problem and a fresh unbiased outlook is needed. Similarly, an external consultant is useful when special expertise is required because no "insider" posesses it or because the internal dynamics are such that, even with the necessary knowledge, the expert cannot be a "prophet in his own house." Quite often, too, an external consultant is a wise investment when time is critical and available staff members are already overcommitted.

How Can They Be Used Effectively? Our experience has shown that consultants are rarely contacted by someone who knows how to use them effectively. Yet the rules are quite simple (although you may require the help of a consultant to take the first two steps before you can proceed further).

1. Determine whether a need exists—"need" being defined as the gap between where you are now and where you wish to be.
2. Assuming a need exists, state the desired results or ends you hope to achieve. But don't confuse desired ends with activity or means. For example, a faculty member's ability to write better test items may be a desired end or result; a workshop is an activity or means of reaching this result.

3. Decide whether an internal or an external agent would be most appropriate—assuming that internal help is available.

4. Identify one or more possible resource persons. Make selections based on their documented service at other institutions with similar problems. You should have referrals from colleagues who have had primary, first-hand experience working with the consultants on the specific purpose you have in mind. (References from persons who have *heard* that "so-and-so is good" are virtually useless.)

5. Personally contact the consultant by phone and follow up with a confirming letter. Be clear in your communications, which should cover the following items (these may seem obvious but experience has shown they are too often overlooked, and failing to deal with them can seriously affect the benefits of the consulting dollars invested):

(a) the nature of the consultantship. Be precise regarding what you want the person to do or the results you expect. Provide information regarding background events leading up to the decision to utilize a consultant. Be honest regarding any problems or issues which might arise. If previous consultants have been used, be sure to state who they were, what they did, and what results they achieved.

(b) the exact dates and times. Remember to include *your* plans for "get-acquainted" cocktail sessions, debriefing sessions at night, and the like; otherwise you may find the consultant has made other plans which conflict with yours.

(c) determine the consultant's needs for A-V equipment, space, duplicating services, and so on.

(d) the fee.

(e) arrangements for lodging and for transportation both to and from the airport and from the motel to the site of the activity.

(f) regulations regarding per-diem allowances, allowable expenses (rental cars, for example), mode of travel (tourist airfare is *not* assumed by some consultants!), and required receipts.

6. Prepare for the consultant's visit. Too often nothing is done to prepare the staff for a visit or else the members are not told early enough to make adequate plans. The results are conflicting appointments, loss of time, and generally reduced effectiveness.

7. During the visit, designate someone to be available to assist the consultant if projectors fail to work, mailed materials fail to arrive, or other unforeseen difficulties arise.

8. Follow-up. Be prepared to invest time, money, and personnel in implementing and maintaining change. This aspect of the change process is frequently neglected as busy faculty members and administrators return to their offices . . . telephone calls, meetings, and so on.

9. Evaluate the results. You've invested scarce resources—what were the outcomes? Time spent in determining the participants' opinion or in attempting to assess the impact of the consultant is time well spent and aids in future planning. Avoid relying only on informal feedback or on the subjective comments of a few persons, because these tend to come only from individuals who are extremely pro or con.

10. Don't expect results overnight. Change, regardless of how slight, rarely occurs immediately. Weeks, even months may go by before it is noticeable, particularly among faculty members who traditionally have to "think it over" before acting. This phenomenon also has implications for evaluation techniques, which should be long-range as well as short-range.

conclusion

The comments and suggestions we have made here are based on a wide range of consultations over a rather long time. These experiences suggest quite clearly that the change process is extremely complex and frequently frustrating. However, these same experiences document that change does take place and that it can be facilitated. External consultants, when properly selected and utilized, are often the essential ingredient in bringing it about.

Consultants have proven to be cost-effective, nonthreatening, and legitimate aides to community college educators. Certainly the objective point of view of most consultants provides a rational starting point for change. And when objectivity is added to extensive experience, external consultants may be the most important force available to guide both the direction and the magnitude of change. Moreover, if the consultant can lower the risks of implementation, he or she will have earned the fee many times over, because the costs of a major change are quite high.

Two caveats must be made, however. Consultants must be carefully selected and used; and the implementation and maintenance of change must be honestly supported by the attitudes, the budget, and the actions of leaders within the institution. Change is a very delicate process that must be carefully nurtured and reinforced.

James O. Hammons is professor and coordinator of higher education at the University of Arkansas. After several years' experience as an administrator in three different two-year college settings he became a university professor.

Wallace E. Hunter is an associate professor of higher education at the University of Missouri. He spent more than ten years as dean at Meramac Community College (St. Louis Community College District) before becoming a university professor.

Some of the attributes and activities of campus change agents are described.

internal change agents

alberta goodman

As is certainly well known by now, the community college is no longer just a transfer institution, and the nature of its student body has changed greatly as well. But teaching methods generally have not kept pace. The instructor who thought it all right to teach all students the same way in the first five decades of this century is discovering that it "ain't all right no more." Professor Print-Oriented may find that some cultures do not place a high value on print as a form of communication; some students in her class may be unable to, as well as unwilling to, read. Professor Punctual may discover that black peoples' time clocks are different from hers or that people in wheelchairs or on crutches need bathroom breaks more often than others do. Professor Podium, who enjoyed the relative security of a classroom with desks, chalkboard, and visual aids, may now have to make do with a cramped prison cell with no facilities, the second floor of a bank building with business transactions going on all around the class, or someone's living room. Here, then, is the faculty member ready to impart the knowledge of his field through a detailed logical lecture; but here also are many students, who may derive little benefit from such a presentation. Surrounding both is the community college with its commitment to meet the needs of its varying elements.

The issue is clear. The college must meet its commitment, and therefore the onus is on the college to change the teaching environ-

ment. If the community college were a professional office network, in which each faculty member received clients only so long as he kept up with the latest advancements in the field, the solution would be simple. Professor Professional would simply take the necessary time and funds (passing the costs on to the consumers) to update and increase her skills, or would soon be left with insufficient clients to continue a practice. Vacancies would appear and the newest, brightest practitioners available would rush in to fill them. However, owing to the role of inflation, unions, tenure, or custom, many faculty members who are products of university-oriented backgrounds now have ten- and even fifteen-year community college service pins. Often this group, which is costing the most in terms of salaries, has been changing the least. In addition, given the economic fluctuations during the past ten years, few are voluntarily seeking job changes. This situation, coupled with the slowing of enrollment growth, means few job openings and very little chance to cause change through new blood.

The entrenched teachers (and often the secretaries and other members of the support staff) are in an unenviable position. Many who are sensitive to their students see the new needs emerging, and yet squirm helplessly, not knowing how to change in order to help meet these needs. Since faculty members do not charge the fee that practicing professionals in almost any other field do for rendering service to the client, and since retraining would cost a great deal in time and money, those who want to change find it difficult.

Internal instructional change agents provide one solution to this problem, and they have certain advantages over other means of initiating change. Obviously, having all faculty members go off campus to learn the new skills they need is extremely expensive and burdensome, as well as potentially ineffective and haphazard. And having all training conducted by external consultants is likewise quite costly in terms of both time and money. In addition to paying for travel, fees, and expenses, the administration must take its time (and hence more dollars) to educate each new consultant concerning the current directions and foci of the campus. Further, although the external consultant brings specific expertise to the college, he/she generally acts as a catalyst only, whereas the internal agent provides expertise as well as support and follow through. Another advantage of the insider is that he or she is often drawn from the faculty and is therefore present on campus, easily accessible to colleagues. This person is also aware of and committed to the aims of the community college (or should be, to be chosen for this task). Thus, the internal agent can assist several constituents—students

who want instruction tailored more closely to their needs and learning styles; faculty members who desire to go into the custom-tailoring business; and administrators seeking practical ways to offset the extra cost of having custom tailoring instead of mass production.

A remaining question is, "Who should this person be?" Although a dean or department/division chairperson may have the expertise to perform this function, he or she may be unable to do it. When one has to fire, evaluate, and promote, one has difficulty simultaneously being the helping, supporting, nurturing change agent. And if the change agent and supervisor are the same person, teachers obviously cannot confidentially complain to the agent about their supervisor, as they like and need to do. Such off-the-record ventilation is often the first step on the road to change; people need to get out of their personal systems the hostilities they may feel toward the instructional system before they can take a look at what their personal systems can do to effect change.

This conflict of interest which arises from combining the two functions is exacerbated by the other problems of midmanagers on most campuses: they are overburdened, unable to assume additional responsibilities, and often already split between teaching and administering. Neither fish nor fowl, they may or may not be trusted enough to swim or fly with subordinates or supervisors. From the midmanagers' point of view, then, such a fusion is less than desirable. What about from the change agent's viewpoint? Because this person by definition is encouraging change, he or she may be seen as a threat. Adding line power to this already threatening role could well be the plus that would ensure failure.

So the internal agent who seeks to help instructors improve their teaching should be a former faculty member who has special enthusiasm and training for the job. What other attributes does she have, and what does she do?

An effective internal change agent first must be flexible. Imagine someone who has difficulty adjusting to rapid change, or bending with administrative winds, trying to help others change. To demonstrate this flexibility, the agent needs facility with various vehicles for reaching people. This flexibility covers many strategies which require training. Depending upon financial resources available, the agent should be teaching no more than one class. That one class is important, though, because the agent needs to maintain and build on whatever credibility he/she has established during his years of full-time teaching with his colleagues. He needs to remain as much as possible one of them; furthermore, the agent needs to stay personally in touch with the val-

ues and attitudes of the students, and to have a group with which to try out new teaching techniques as he acquires them. Thus, the agent remains a full-time employee, teaching one class and released from teaching for the remainder of her load to function as a change agent. Again ideally, the class should be scheduled when most of the other faculty are teaching so that she will be available during the slack hours to work with peers.

In terms of training, the agent first must assess the nature and needs of her campus and colleagues. Having done so, he or she can then decide, in priority order, whether to apply for training in human relations, developing programmed materials, using audio-visual equipment, role playing, utilizing and/or creating classroom games and simulations, developing course packages, etc. In response to these applications, the institution will have the opportunity to demonstrate its commitment to innovation by discovering sufficient funds to get its agent adequately trained. Training, of course, should be on-going; the agent may go away for certain workshops or may hire an external consultant to come in to share particular expertise. The amount and depth of training will vary greatly from institution to institution.

The vehicles by which agents transport their skills to their colleagues may vary just as greatly. For example, for those colleagues who learn best experientially, workshops may be suitable. Thus, the change agent needs skill in designing, organizing, conducting, and evaluating workshops. For the teacher or manager who desires to change her teaching or leadership style but has neither the time nor the inclination to pursue this process in a group, private consultation sessions may be more appropriate. To make such conversations productive, the change agent needs a spectrum of human relations skills from active listening to confrontation-leveling, from feeling comfortable during periods of contemplative silence to being able to interrupt silences by throwing out problem-solving life lines. Still other staff members may learn by reading, and yet have little time to do so. To help these people, the instructional change agent may set aside a regular part of his week to read and do research on new aids and methods; then, either by a quick phone call, dropping in, or using a mailing list (the degree of closeness or informality depends of course on the readiness and style of each client), the change agent brings innovations and people together. The agent may also set up a faculty resource and research area with the atmosphere of a lounge, with books, magazines, films, and equipment out and available just like the coffee, tea, and bouillon cubes. Since workshops are offered at precise times which are going to conflict with some

peoples' schedules, and since one-to-one consultation may be both time-consuming and threatening, such a "lounge" may appeal to teachers who enjoy getting away from their desks and supervisors to a couch or a beanbag with a buddy.

Perhaps most important in this area of flexibility is a skill similar to delegating. The internal agent, fully cognizant of her own limitations, must be able to discover, utilize, and showcase the skills of her colleagues. Tremendous talent exists on most campuses, but is rarely used. Why isn't Murray Math helping the staff understand the metric system? Probably nobody has asked him. Why hasn't Professor Sarah Seminole helped other faculty members relate to students from her culture? We haven't asked her to. Before pooh-poohing this answer with such negations as, "There's no money to pay Murray," or "Sarah's classload can't be reduced to do this," try asking them. Frequently, the flattery of being asked to share is payoff enough; a note of thanks, a mention in the campus newsletter, or a verbal acknowledgment in the cafeteria can ice the cake.

Regardless of what strategies the agent develops and utilizes, or locates in colleagues, he must at all times demonstrate and maintain not only real confidentiality, but also the appearance of confidentiality. As sensitive issues arise between, for example, the faculty and the administration, or the classified staff and the administration, the internal change agent may not forget who the client is or what his task is. Whereas others may be able to bite into the fruits of the grapevine, the change agent must not. If appropriate, issues (and these may be any issues since different people are sensitive to different concerns) can be confronted by asking whether the group needs to investigate to what extent such fruits are growing; but if the change agent overhears some tidbit and passes it along unthinkingly over coffee today, by tomorrow paranoia will begin to develop in some part of the client system. By the same token, even if the agent keeps all "confessions" and issues inviolate, but is seen walking into the academic dean's office for five hushed minutes right after consulting the dean's subordinates, the damage is done. Since it is difficult to motivate people to want to change, and since it takes much courage to admit having trouble teaching X students Y material, the development and maintenance of a firm trust between the agent and members of the faculty are paramount.

"Do as I say, not as I do" is a poor learning maxim for anyone, but for the internal instructional change agent it is disastrous. The agent is always modeling whether or not she wants to be. Somehow the designation of being in a position to help others change, which carries

with it some mantle of authority, casts the agent into the arena. Often some very angry Christians are looking for any grounds on which to turn thumbs down. As with any new person in a position, or any new position in an organization, people want to test the mettle of this person or position. Therefore, the change agent needs to be certain that what he says, does, demonstrates, advocates, he believes and practices. In conducting team-building sessions within a department, for example, the change agent may be stressing the need for a vehicle whereby people can share negative feedback without becoming defensive. How can she do this at the same time that she shouts at someone who has fallen asleep in her workshop? If the change agent focuses largely on making curricular innovations in the classroom, he is wise to be trying out new things in his own class. If she wants people to feel comfortable asking for help, she will want to ask for help from among her colleagues, too. Such modeling is not a new idea—it appears in nearly all moral and religious systems, from the golden rule to Immanuel Kant's categorical imperative. But the internal instructional change agent can't just have a mental conviction that practicing what he preaches is effective; he/she must model appropriate behavior consistently.

In addition to being flexible, trustworthy, and able to model effectively, the agent needs certain other skills and capacities. In the first place, since a common human reaction to that which asks us to change is hostility, the change agent needs must recognize that he may be viewed as "the enemy," "some new hotshot," "the gestapo," "that administrative flunky," and the like. (These are just a few endearing comments I have heard.) The agent needs to be as objective as possible about such feelings, neither absorbing nor returning them, but understanding them. Obviously, to return hostility for hostility would defeat the client, and to take the anger personally would destroy the agent. The agent must also be ever watchful and perceptive in trying to remain aloof with regard to campus politics. Not only does this help the agent avoid becoming a part of the problem, but also it reduces the number of valid reasons which promote hostility.

Objectivity and impartiality are needed further to discharge the agent's primary responsibility: helping others with problem solving and with testing out potential solutions. Thus, when acting as a facilitator during problem-solving sessions, the agent should be able to listen to the brainstorming and synthesize various positions without manipulating the discussion toward her own bias.

However, since the skills and capacities involved in handling hostility, staying out of politics, and remaining objective are difficult to

develop and maintain—especially when others are intentionally trying to prevent their development—the agent also needs to be able to confront. This involves being able to take a risk and say how one feels while owning that feeling and finding the best way and time to express it so that the receiver can hear. In addition, the change agent realistically needs to remember that such confronting may help him return quickly to the job he held previously!

Finally, in order to help herself maintain psychological health and well-being, the internal instructional change agent needs the ability to ventilate and a system for so doing. On a given campus almost everyone has someone he can talk with off the record. But if the change agent is working alone, he may not have such a listener, and so he should find an outside resource to blow off steam with. Even such an outsider must be carefully selected and ideally have no connection with anyone else at the college. If the agent works with a team, its members frequently can provide one another with the support and the debriefing needed. And they are needed. The agent must find out who can help the helper if he is to remain effective.

Finally, this picture of the ideal agent of change would not be complete without mentioning three other desirable attributes. First, in order to use flexible strategies for reaching faculty members and to work effectively with administrators, classified staff members and students, too, the change agent should be able to maintain a high energy level. Resulting from a combination of good health, enthusiasm, and a belief in what one is doing, this energy is very important. Although it is easy to celebrate with the faculty member who comes in on Monday morning to tell you about his success with a new game simulation, it may be more difficult to communicate that same spirit at five o'clock when maybe the fiftieth person in need of a big smile or an enthusiastic reply comes through the door.

The change agent should, secondly, be able to feel and exhibit nearly unlimited empathy and patience with her clients. Headache number 212 to the change agent is still headache number one to the current client. Like a counselor, a facilitator, a parent, the change agent wants to listen actively and sensitively to the client without judging whether or not the client really has a problem, whether that problem is large or small for the client, or how the problem might look to some other client. This description does not mean that the agent just sits; it does mean that he strives to empathize with every client and to help that client make changes at her own pace.

Third, the internal instructional change agent should be willing

to demonstrate his belief in the need to change and grow by engaging in a personal growth program. The agent has as many problems, emotional needs, and areas for growth as anyone else. But unlike them, he usually has to cope with them off campus, since he is responsible for maintaining confidentiality with each client or potential client (everyone on the campus) and is probably conducting whatever programs are offered to promote personal growth on campus. He needs to go elsewhere to acquire new skills for professional use and to be in an environment where he can deal with his own anxieties and frustrations.

Above all, since the internal instructional change agent has all of these high ideals for which to strive, she should also be able to walk on air. (Walking on water has been done already.)

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The contributions of the university to improving instruction range from research through graduate preparation to workshops and information dissemination.

the university as an agent of instructional change in community colleges

raymond e. schultz

As community colleges have searched for ways to better serve a highly diverse student body—to go beyond just "opening the door" by developing new curricula and teaching methods—they have sought and obtained assistance from a number of sources. One of these has been the university. But until the mid-1960s, university contributions to community college development were limited primarily to a few writings and a handful of graduate programs for the preparation of administrators. Less than a dozen major universities had such graduate programs or faculty members who were seriously addressing community college developments. But that situation has changed. In the past ten years, major commitments to assist community colleges in their development have been made by universities in all parts of the country.

Although that assistance is going to every aspect of community college development and operation, this article focuses on what the university is doing to help community colleges improve their instruction through: (1) scholarly study and investigation; (2) faculty prepa-

ration and advance graduate study for instructional leadership; (3) university-based inservice workshops, institutes, and short courses; (4) outreach programs and services; and (5) publishing and disseminating information.

scholarly study and investigation

The contributions of universities in this area have been of several types. One is the research of graduate students directed by university professors, frequently for doctoral dissertations. During the five-year period 1970–1975, more than two hundred dissertations related to instruction in community colleges were reported in *Dissertation Abstracts International.* Following is a sample of recently completed dissertations selected to show geographic and institutional representation:

Bailey, Samuel D. *Educational Needs and Existing Resources for Community College Curriculum Development.* University of West Virginia, 1973.

Tullis, Lyle V. *An Integrative Theory and Curriculum Model for General Education in the Two-Year College.* Oklahoma State University, 1973.

Jenkins, Charles G. *Provision for the Superior Student in the Two-Year College: A Case Study with Recommendations.* Northern Illinois University, 1973.

Eggebrecht, David W. *Development of a Junior College Curriculum for Language Divergent Studies.* Marquette University, 1973.

Haywood, Margaret L. *A Plan for Incorporating Black Students into the General Education Program of a Community College.* University of Florida, 1974.

Odm, James A. *Considerations for Change in Community College English Instructional Programs.* University of Michigan, 1975.

Fawley, Paul C. *The Administration and Supervision of Remedial Mathematics Programs in Two-Year Colleges.* University of Utah, 1975.

Hahn, Thomas C. *Audio-Tutorial Instruction: Effects on Faculty and Departments in Selected California Community Colleges.* University of California, Los Angeles, 1976.

Kistulentz, Andrew D. *An Analysis of Two Approaches Used in Teaching Reading and Study Skills Improvement in Two-Year Community Colleges.* Pennsylvania State University, 1976.

In addition to directing the research of graduate students, university professors themselves have conducted significant studies of community college teaching. Noteworthy is the research by John Roueche and Oscar Mink at the University of Texas. Since 1972, they have con-

ducted four major research projects involving more than thirty community colleges. A number of publications have been produced based on that research. They include *Catching Up: Remedial Education* (Roueche and Kirk, 1973) and a series of monographs, among them, *Improving Student Motivation and Attitude Development in the Community College.*

Major scholarly contributions to community college instruction have also been made at the University of California at Los Angeles. They were begun by B. Lamar Johnson and have been continued by the research and writing of Arthur M. Cohen, Florence B. Brawer, and John Lombardi. Among their pertinent books based on research and/or scholarly analysis are the following:

Johnson, B. L. *Islands of Innovation Expanding: Changes in the Community College.* New York: Glencoe Press, 1969.

Cohen, A. M. *Dateline '79: Heretical Concepts for the Community College.* New York: Glencoe Press, 1969.

Cohen, A. M., and Associates. *A Constant Variable: New Perspectives on the Community College.* San Francisco: Jossey-Bass, 1971.

Cohen, A. M., and Brawer, F. *Confronting Identity: The Community College Instructor.* Englewood Cliffs, N.J.: Prentice-Hall, 1972.

In addition, Brawer and Cohen have conducted research through the specific medium of the center for the Study of Community Colleges at UCLA. For instance, they recently did a series of investigations on teaching the humanities, including the curriculum, faculty, and students. The results of that research have been published in a series of ERIC monographs.

faculty preparation and advanced graduate study

Universities have made a significant contribution to instructional change in community colleges through graduate programs that prepare faculty members and administrators to effectively serve a heterogeneous student body. One of the earliest of these was the Interdepartmental Master's Degree Program for Junior College Instructors introduced at Florida State University in 1959. The basic components of this program were (1) a major in the teaching field, (2) a minor in community college education, and (3) a supervised teaching internship. Similar efforts were undertaken by many universities in the late 1960s and early 1970s, spurred in part by funding from the Office of Education and the National Science Foundation. Those programs had two related objectives. One was to increase the supply of community college instructors to help meet a critical staff need which had been created

by the establishment of many new institutions. The other goal was to encourage universities to design graduate programs that would produce well-qualified community college teachers.

The government's support was substantial, as were the results. In 1971–1972, the Education Professions Development Act funded fifty-four university programs with 557 fellowships specifically for the preparation of community college personnel, and another thirty-one programs were given 263 fellowships to be divided among two- and four-year personnel (O'Banion, 1972, p. 128). Many, though not all, who received those fellowships subsequently assumed positions as community college teachers and administrators with instructional leadership responsibilities. In 1973 the American Association of Community and Junior Colleges published a catalog listing eighty-five universities which reported that they offered graduate programs to prepare community college instructors. I do not mean to suggest that these programs were all well conceived for that purpose, but certainly a good number were.

Doctoral level programs for the development of instructional leadership during the 1960s existed primarily in the eleven universities which composed the W. K. Kellogg Foundation's Junior College Leadership Program. That program was initiated in 1959 by the Foundation in cooperation with the American Association of Junior Colleges and funded by them for about ten years. The recipients of these fellowship and support services were the University of California at Berkeley, the University of California at Los Angeles, the University of Colorado, Teachers College of Columbia University, Florida State University, the University of Florida, Michigan State University, the University of Michigan, the University of Texas, the University of Washington, and Wayne State University. Because their programs were not limited to instructional leadership, some gave more emphasis to that area than others. However, more than two hundred graduates of those programs during the 1960s assumed community college leadership roles, many of which were concerned with improving instruction.

Those programs, along with the rapid growth of community college enrollments, provided the impetus for other universities to mount similar efforts. In 1970, R. Smolich surveyed colleges and universities to determine how many graduate courses and programs they offered to prepare community college leaders and staff members. He identified eighty-seven universities with such programs (O'Banion, 1972, pp. 121–24, 133). Morgan's more recent analysis (1976) shows a decline to fifty-eight, but the number is substantial nevertheless. The

reduction between 1970 and 1976 may be accounted for, in part at least, by the discontinuation of federal funds for such programs.

A number of recently developed graduate programs address specific instructional needs. For instance, Appalachian State University has begun a program to prepare vocational-technical teachers. They recruit associate degree graduates from community college vocational-technical programs and provide them with a two-year, upper-division program. This training extends the students' backgrounds in their fields of specialization and also gives them a background in community college teaching and curriculum development.

The University of Michigan has developed a doctor of arts program in the teaching of English. Although the program is designed to serve both two- and four-year colleges, its program director came from a community college, and hence the curriculum is particularly attuned to the needs of community college English and humanities instructors (Fader, 1975, pp. 41–47). Other graduate programs in English and the humanities are in operation at the University of Florida, the University of Massachusetts, and the University of Iowa. All were modeled after the *Guidelines for English Teacher Training Programs* developed by the Conference on College Composition and Communication (Cowan, 1971, pp. 303–13). Other fields have also created commissions to address the preparation of two-year-college teachers. An example is the Committee on Physics in the Two-Year College.

The programs developed recently by two other universities will be described briefly to conclude this section. In 1975 the University of Texas-Austin initiated a community college teaching program designed for doctoral students in the humanities, social and behavioral sciences, and natural sciences. Advice on the qualifications that would make Ph.D. graduates attractive to community colleges was sought from community college administrators. The features of the program include seminars on instructional innovation, nontraditional teaching techniques, individualized and self-paced instruction and assessment techniques, as well as a teaching internship in a community college.

Washington State University in the fall of 1975 undertook a joint program with Big Bend Community College to prepare staff members for developmental learning centers (also referred to by such names as learning skill centers and basic skills laboratories). A background in either English or mathematics is required to enter the program. The students works toward a master's degree, taking courses in adult learning, the teaching of reading or mathematics, individualized instruction, and the community college. Each student has a full quarter's

internship in the Big Bend learning center. The final phase of the program occurs in Europe. The student spends a summer working in Big Bend's Community College PREP program at a military base, where he helps on-site instructors to improve their competence in teaching basic learning skills.

In summary, university graduate programs to serve community colleges have not only increased in number, but have become more relevant to the needs of community college teachers. An important aspect of this change is the fact that university professors in the academic disciplines are becoming involved in planning and implementing graduate programs designed specifically for preparing community college faculty members.

university-based workshops, institutes, and short courses

Before community colleges occupied a significant place on the educational scene, universities were offering workshops, conferences, and short courses for public school teachers, usually during the summer. And thus when the inservice development of the community college professional staff became important, the universities followed the earlier approaches.

Like the preservice graduate programs, these workshops and courses received much assistance from the federal government during the late 1960s and early 1970s. Particularly relevant to instructional change were the National Science Foundation's program for upgrading science teachers and the short-term training programs and graduate-level institutes funded by Part E of the Education Professions Development Act.

In 1970, the American Association of Junior Colleges surveyed the inservice education programs available to community college staff members. This study disclosed that:

- There were 276 workshops and short courses conducted in 1970. (They included both university-based and field-based opportunities.)
- Approximately 40 percent were concerned with academic disciplines.
- Ten percent dealt with vocational-technical matters.
- Thirty percent were on curriculum development, learning theory, and related topics.

The most recent national survey of university-based workshops, conferences, and short courses was made by Chavez (1973). He identified thirty-eight university-based short-term programs: eighteen were

related directly to improving teaching—individualized instruction, educational technology, teaching strategies, and evaluation of instruction; eight emphasized teaching the educationally disadvantaged. A substantial majority of those programs received support from NSF and EPDA grants. It is difficult to predict how many such programs have been continued without outside funding. Since university and community college budgets became very tight at the same time federal funding for faculty inservice programs diminished, the toll has probably been high. Even so, universities still provide a variety of short programs, primarily in the summer, which are directly applicable to community college curricula and instruction. It has become common practice for these short-term activities to be planned and staffed jointly by community college and university faculty and administrators.

outreach programs and services

Universities are increasingly taking their services to community colleges into the field. Professors are serving as consultants, holding or participating in workshops and institutes held at community colleges, and offering courses on community college campuses. Community colleges utilize this expertise in a host of ways. For instance, they invite reading specialists to assist with designing developmental reading programs, experts to advise them on how to develop audiotutorial laboratories, content-area specialists to help redesign curricula, and instructional design specialists to conduct workshops on topics such as writing course objectives.

Universities increasingly are encouraging their staff members to assist community colleges and, in some cases at least, are recognizing such services in their reward systems. Washington State University is a case in point. There, half the time of a professor of community college education is made available by the university to work with community colleges of the state. The only cost to a community college is the professor's travel expenses.

Two studies have been done on the field services provided community colleges by universities. Cooper (1975) surveyed thirty-six universities which had higher education programs with a community college emphasis. Among his findings were the following:

- The services of the university were made available without cost to in-state community colleges upon request.
- Services were generally of an ad hoc nature, though universities with established programs carried out more long-term and continuing activities than did universities with newer programs.

• The major efforts of the respondents consisted of inservice training (through courses) and consulta[illegible]ith faculty and staff members. The older university programs [illegible] more service than did the new ones in relation to instructio[illegible]ement and curriculum development.

The second study was conducted by Bogart (1976), who sought information from community colleges and universities on the continuing and inservice education of community college faculty and staff members. He received responses from fifty-eight community colleges and thirty-three university professors who were members of the Council of Universities and Colleges of the AACJC—the organization of professors with a special interest in community colleges. Eighty-six percent of the community colleges reported that they had inservice development programs for their full-time instructors. (Presumably, most of these programs were conducted on community college campuses, though their location was not determined by the survey.)

Both the university and community college respondents identified topics that inservice staff development should address. Most of both groups agreed that teaching methods (82 and 83 percent, respectively) and the evaluation of instruction (70 and 64 percent, respectively) were important topics, followed by curriculum development and the philosophy of the community college. The two groups also agreed that workshops of fewer than three days are the best vehicle for these activities.

Another recent investigation which bears on this same point was conducted by McCabe and Smith (1975, pp. 13–14). They asked a group of experienced community college teachers, department heads, and administrators to identify the skills, abilities, and attitudes needed by community college faculties. Their findings generally supported those of Bogart (1976), but they identified a number of attitudes and personality factors that were not included in Bogart's study. It is debatable whether attitudes and personality factors can be changed by an inservice or graduate program. They probably need to be dealt with primarily as selection criteria.

Bogart's survey poses a question of particular significance to this paper, namely, What role should the university play in the continuing and inservice education of community college faculty and staff members? Aside from the typical graduate courses, degree programs, consulting activities, and conferences, university specialists in community college education envision their role as one of working closely and cooperatively with community colleges in identifying inservice education

and faculty development needs. Further, once needs are identified, the community college and university should jointly plan inservice programs and activities, with the university recommending and providing needed expertise. The university professors believe they should become involved only when community colleges request their assistance, a point of view shared by the community college leaders who were included in Bogart's study.

publishing and disseminating information

Universities also help to improve community college instruction by publishing and disseminating information. The best example of this is the ERIC Clearinghouse for Junior Colleges located in the University of California at Los Angeles, whose well-established community college education program has enabled the Clearinghouse to attract and retain an excellent director and supporting staff. Since its inception in 1966, the Clearinghouse has carried on an outstanding program of document acquisitions, publications, and special services. Several thousand documents, many of which deal with curriculum and instruction, have been put into the ERIC system. Those documents are indexed in *Resources in Education* (formerly *Research in Education*) and are available to community college faculty members and administrators both on microfiche and in hard copies. In addition, the staff has prepared and distributed about seventy publications, including a number on instructional change. A third activity of the Clearinghouse is giving assistance to educational practitioners by preparing bibliographies and conducting searches and research summaries on specific topics. This service is available to community college faculty and staff members.

A number of other universities also publish and disseminate monographs and reports which bear on curriculum and instruction. Notable among them are the publications of the Center for State and Regional Leadership at Florida State University and the University of Florida and the Center for the Study of Higher Education, Pennsylvania State University. Some examples of their publications are:

First Level Management: Legal Implications and Responsibilities for Selection and Retention of Faculty. Department of Higher Education, lorida State University, 1973.

Proceedings: The Conference on Questions and Issues in Planning Community College Staff Development Programs. Department of Higher Education, Pennsylvania State University, 1975.

Information and analyses also emanate from the universities

in the form of professors' writings in professional journals. Issues of community college-oriented journals frequently carry such articles, many of them related to curriculum and instruction. Further, their editorial boards include university specialists in community college education.

Finally, four professional journals addressed to the community college are published at universities. These are: *The Community College Review* (North Carolina State University, Raleigh); *Community College Frontiers* (Sangamon State University, Springfield, Illinois); *Community College Research Review* (Virginia Commonwealth University, Richmond); and *Teaching English in Two-Year Colleges* (East Carolina University, Greenville).

the future

Since 1960, universities throughout the nation have made major commitments of resources and talents to assist community colleges in carrying out their mission. Less than a dozen major universities had community college specialists on their faculties in 1960. But by 1970 the number of such specialists among all types of universities exceeded seventy. That represents a substantial pool of talent to carry out the universities' promise to play a positive role in community college development. Further, that number would be multiplied several times if it included university discipline-related faculty members and other specialists who have talent to offer and a commitment to work with community colleges.

How should the universities' commitment be carried out in the future? In my view, they can contribute the most to changing instruction in community colleges in the following ways.

1. Research and scholarly activity should be a major part of their effort. Most of the theoretical and experimental development required for significant improvement in teaching and learning will need to be carried out at the university. Community college specialists within the university can play a key role in this endeavor. First, they should be actively involved in such research and scholarship. Second, they can act as middlemen—asking community college faculty members about what kinds of research are needed and obtaining commitments to conduct experiments and investigations on two-year-college campuses. In addition, they should interest graduate students and colleagues within the university in undertaking studies and related activities. Finally, they should see to it that the results of these efforts are reported to community college practitioners.

2. Preservice preparation programs are coming under scrutiny, in part because of the imbalance between faculty supply and demand. Community college administrators are becoming increasingly aware of the type of faculty members they need and want. Therefore, university programs to prepare such teachers must be well conceived and implemented. "A few good men (and women)," to borrow a phrase from the Marines, will be the order of the day. I recommend that an advisory committee composed of community college instructors be formed to help design and evaluate each preservice program. Finally, preparation programs are especially needed to train vocational-technical teachers, developmental learning experts, and other specialists.

3. Inservice development for community college faculty will probably continue to be emphasized because of low faculty turnover, a growing part-time faculty, and a greater commitment to quality instruction. What role universities play in meeting this need will be determined largely by two factors: first, the type of relations they maintain with community colleges, and second the competence and commitment of the university professors who are available for this purpose. Maintaining close contact with community colleges takes time, effort, and sensitivity. Requests for assistance need to come from the colleges, but the closer the contact a university maintains, the more likely it is to be asked for help. The other side of the coin is that the university needs to recognize field work well done in its reward system. Without that, it will be difficult to obtain and impossible to retain the involvement of faculty members who are competent at assisting community colleges with their inservice development programs.

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The faculty committee has several advantages over other models in promoting professional development and better teaching.

the staff development committee: a model for instructional change

terry h. smith wallace

Of the several administrative means of managing staff development programs such as a line manager, an administrator-in-charge, a staff person assisted by an advisory committee, or the industrial model one of the most recent and perhaps unusual is the faculty committee. In this model, a faculty committee plans, implements, and evaluates the institution's staff development program. Such an approach to the administration of inservice education is based on at least three basic premises: first, if representatives of those who are to be "developed" are included in the planning, the resulting program should be more relevant; second, staff involvement leads to better participation in the resulting program; and third, if the committee is collegewide in its membership, a coordinated program should result.

Regrettably, the literature of staff development (Wallace, 1975; Tirrell, 1976) is almost totally mute on the exact nature, functions, and results of such a committee. Only one short description of the model's utilization presently exists, that dealing with the highly successful program undertaken by Parkland College in Illinois (Chan, 1974). Thus, the purpose of the following discussion is to further an understanding

of the approach by examining the model as it is evolving at Harrisburg Area Community College. The focus here is on (1) sketching briefly the history of the committee and the setting in which it operates; (2) delineating the committee's rationale and philosophy; (3) reviewing the group's operation, including its policies, guidelines, and administrative support; (4) summarizing the present accomplishments and future plans of the group; and (5) reviewing some of the advantages and disadvantages of the model.

history and setting

Harrisburg's staff development committee—termed the Professional Growth and Instructional Development Committee (PGID)—grew out of two somewhat unusual circumstances: the collapse of an administratively directed on-campus inservice program and the success of a faculty-generated workshop on designing instructional materials. The original staff development program was vigorously promoted by its first president, Clyde E. Blocker, during the late 1960s and early 1970s. The effort was characterized by liberal provisions for off-campus professional growth activities. A faculty aid program was instituted covering sabbatical leaves, leaves of absence, loans, and grants-in-aid for professional studies. Liberal travel allowances were made available for visits to conferences, workshops, and other community colleges. Moreover, strong on-campus efforts at inservice training evolved under the direction and professional involvement of Blocker, himself one of the leading scholars on the two-year college at the time. These included orientation seminars for new faculty members, inservice workshops, group subscriptions to important community college journals, and the establishment of a special library collection on professional growth.

However, because of a number of unfortunate events, on-campus inservice training efforts declined dramatically after 1972. The deteriorating health of the institution's chief executive and finally his retirement, enrollment instability, two natural disasters (hurricanes Agnes and Eloise), budgetary restraints, and several other problems led to the almost complete demise of internal staff development activities. Fortunately, the institution's Faculty Aid Program continued intact, encouraging staff interest in professional growth. In fact, the maintenance of this aspect of the program was directly instrumental in fostering the reappearance of on-campus activities.

After an almost complete two-year hiatus in such activities, a faculty colleague, Willie Woods, and I traveled to The Pennsylvania State University to attend a three-day workshop on the design of community college instructional materials led by James O. Hammons, then a research associate with the university's Center for the Study of Higher Education. Not only were we impressed with the workshop, but we saw how it could be applied on our own campus. Thus, on returning to campus, we formulated a proposal to bring both Hammons and the workshop to Harrisburg—a plan which was enthusiastically supported and endorsed by the administration. Thus, in the fall of 1975, the workshop was presented on campus and appeared to be well received by faculty participants. In fact, a number of them expressed a strong interest in having more such local inservice activities and in planning and implementing those programs. Faced with this clearly voiced desire, Woods and I produced a second proposal, one for a faculty staff development committee. Support was readily forthcoming from those who had earlier voiced interest, as well as from the administration and faculty organization. Further, the administration endorsed the effort not only in spirit, but with money, offering to fund proposals which the committee generated. Support for on-campus staff development activities was included in the 1975–1976 budget, and this amount was substantially increased in the 1976–1977 fiscal year.

As the committee took shape, it proposed to act as a clearinghouse with the following responsibilities:

1. to identify the faculty's needs for professional growth.
2. to improve communication among various units of the college with the aim of creating a more integrated, comprehensive program of professional growth activities related to the goals of the college.
3. to propose, plan and present programs directed toward professional growth and instructional development.
4. to recommend priorities and goals for professional growth and instructional development activities on the campus.
5. to develop close, cooperative working relationship with other committees of the faculty organization in recommending policy changes and budget priorities related to professional growth and instructional development.

The members of the committee are all teachers. No administrators sit in on its deliberations, unless they are invited by the faculty. Further, membership is voluntary. In fact, from the beginning, the group has stressed that it prefers dedicated volunteers to lukewarm

appointees. Thus, the committee periodically canvasses the total faculty for new volunteers. The chairperson, like the leaders of other faculty committees, serves without released time and at the desire of the organization. Fortunately, the dedication of the members lifts enough weight from the chairperson's shoulders that released time is presently not necessary.

rationale and philosophy

The committee's first task was to delineate its rationale, philosophy, and responsibilities and to develop guidelines for proposing and presenting professional growth activities. As its members saw it, the committee existed for five basic reasons. First, the attendance at the instructional materials workshop and the initial number of faculty volunteers for the group suggested that the professional staff needed and wanted inservice training. Second, no vehicle existed on campus through which faculty might raise concerns or through which they might propose programs and identify problems related to professional growth and instructional development. Even more important, the committee believed that only instructors could identify the professional needs they really wanted to meet; only they could implement their training by changing their instruction; and only they could ensure that the evaluation of their work would become an instrument for further development. Finally, the committee strongly endorsed the assumption that faculty-initiated programs are very important in fostering professional growth and instructional development. They believe staff members are more committed to change when they have at least some responsibility for choosing its direction.

Armed with this rationale and a knowledge of the efforts of others in the field (such as Zion and Sutton, 1973; Chan, 1974), the committee proceeded to develop its philosophy of professional development. The resulting product clearly defined the faculty's vision of inservice education.

(1) The chief rationale for professional growth programs is instructional improvement.
(2) The goal of professional growth programs should *not* be to remedy deficiency, but to benefit every member of the professional staff as much as possible.
(3) Programs for faculty development should resemble in purpose, planning, and procedure the best teaching/learning models for student development.

(4) Professional development should be:
   (a) ultimately for everyone—administrators, faculty members, secretaries, clerks, and maintenance personnel.
   (b) an interactive process whereby individuals explore beneficial relationships with the organization.
   (c) based on the planned allocation of resources that balances individual interests and institutional goals.
   (d) a response to the felt needs of all members of the organization.
   (e) a context for selecting strategies in relation to individual styles and institutional goals.
   (f) a way of capitalizing on the unique talents and professionalism of each member of the organization.

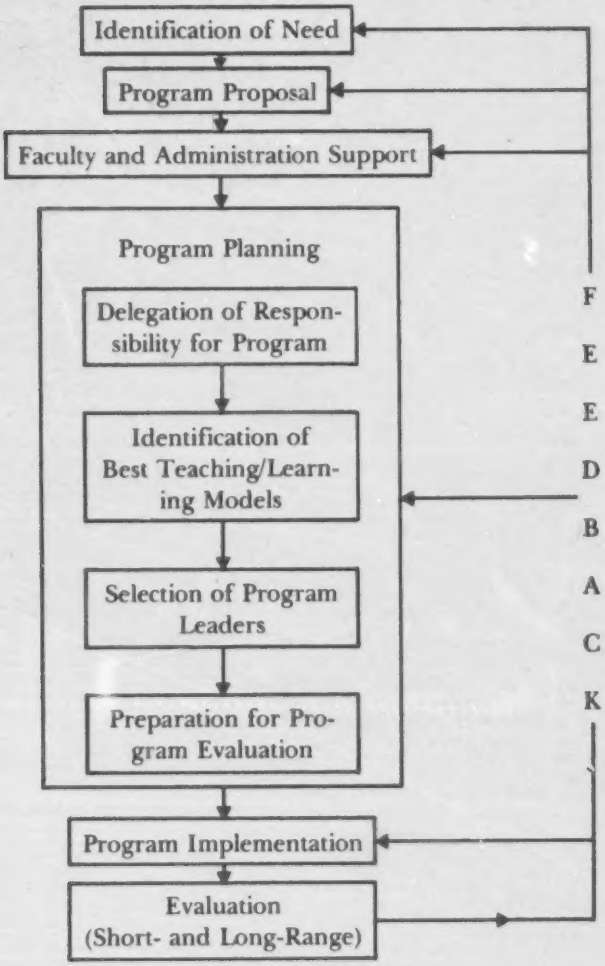
(5) Professional development is *not*
   (a) for "someone else."
   (b) an isolated and discrete remedial process.
   (c) based on a haphazard allocation of resources—human, technical, financial, or structural.
   (d) a prepackaged program.
   (e) training in the application of a professional bag of tricks.
   (f) a process for establishing conformity in teaching style, management style, or learning style.

operation

With its philosophy in place, the committee then set up its guidelines for making proposals and for developing and evaluating programs. The committee stated first that it would entertain inservice program proposals from any and all segments of the college community: faculty members, administrators, trustees, classified staff, and students. However, the committee would give the highest priority to those which could fit into a comprehensive plan of professional growth and instructional development, which met the resource constraints of the college, and which conformed to the group's philosophy of professional growth. Moreover, in the course of its deliberations, the committee recognized that it would need to consult with the administration about program funding, coordination with other college programs, scheduling, and other considerations of joint concern. Once the proposals were thoroughly hammered out, support and endorsement for them would be sought from the Faculty Council. Failure to gain that endorsement would require the immediate tabling of the proposed program. Finally, once a proposal had the acceptance of both the administration and the

faculty, the committee accepted responsibility for preparing and overseeing the resulting program.

The committee's procedures and guidelines for program preparation might be illustrated by the following figure:



As the figure indicates, each proposal must aim to meet clearly defined, faculty-voiced needs for professional growth or instructional improvement and must be able to be used or adapted for use at Harris-

burg. Once the proposal has faculty and administrative support, program planning begins. An individual or individuals on the committee is given the responsibilities of planning and managing the affair. These include scheduling the program with an eye to the greatest possible faculty attendance and fostering that attendance by beginning publicity for it weeks, if not months, in advance. Moreover, since committee policy states that each program should resemble the best teaching/learning models of student development, the committee selects program leaders who are sensitive to this concept and who can successfully and productively relate to the college's faculty and to the campus situation. Thus, the committee seeks "known entities" (be they internal leaders or external consultants)—this precaution was taken to prevent its fledgling program from being set back months, perhaps years, by disastrously weak leadership. As a final step in program preparation, plans are made to evaluate the inservice session; the assessment criteria are: the clarity of its rationale and objectives, the clarity and relevance of its content, its structure, the effectiveness of its leaders, and its general effectiveness and future impact. For major programs, two evaluations may be planned, one to assess the immediate impact of the session on participants and a second nine to twelve months later to assess the long-range impact (or reasons for the lack of it) on instruction. The results of such evaluations are fed back to the committee with the aim of improving the future activities. For instance, if a lack of support services is found through long-range evaluation to be retarding desirable instructional innovation, administrative action can then be taken to remove the perhaps formerly unrecognized obstacle.

building instructional change

Although Harrisburg's faculty committee on professional growth and instructional development has only been functioning for one year, its accomplishments and future plans are worth noting. Perhaps its initial accomplishment was a sound foundation from which to launch its work. The group systematically established its rationale, delineated its relationship with the existing faculty committee system, designed its philosophy, and determined basic policy for handling program proposals and implementing them. Then, since its own policies dictated that proposals must be rooted in clearly defined needs, the committee surveyed the campus staff (full-time and part-time faculty members, administrators, counselors, and librarians) to determine their needs. Armed with these data, it has generated a series of proposals pointed toward developing a comprehensive on-campus staff development pro-

gram. These proposals touch on a wide variety of matters, such as the reinstitution of inservice days in the college calendar, the orientation and development of the part-time faculty, a long-range evaluation to determine the impact of the first faculty-generated workshop on the design of instructional materials, an inservice training session for administrators on managing productive change in the community college, and inservice education on a variety of topics ranging from the characteristics on Harrisburg students to instructional trends in the two-year college. As the institution moves into a major period of instructional change under its second president, S. James Manilla, the committee hopes, through its suggestions and efforts, to be a major factor in smoothing the way for that change.

advantages and disadvantages

In reviewing the efforts of the faculty development committee, one should note that the model—like all models—has some definite advantages and disadvantages. As I see it, the committee possesses at least three major assets. First, it represents a nonauthoritarian approach to staff development. Inservice programs generated by the faculty are relatively free of the "threat-quotient" that accompanies those designed by the administration and forced upon the staff. A second plus closely related to the first is that faculty involvement in program planning and implementation can well lead to more highly motivated participation. If one accepts the assumption that faculty members are the only ones who can identify what they really want to do, who can change their teaching methods, and who can make sure that evaluation leads to further development, then only they can spearhead major changes at the institution. A third major advantage is that instructors may be freer to experiment with staff development efforts than the administration. The latter may have to be distinctly conservative in program planning and implementation, because of latent faculty hostility. Superiors may find they have less "right to fail" with their programs in faculty eyes than does a faculty group generating inservice education for its equals.

However, the committee has certain liabilities, too. The fact that the chairperson of the committee normally is not directly responsible to higher levels is one problem. Further, since it is difficult to assign budgetary responsibility to a committee, the inservice program is unlikely to receive funding except on an item-by-item basis. These two facts suggest that the faculty often ends up waiting for support for its various programs and loses valuable time in developing a comprehensive program. Another significant liability may lie in the committee's

membership. Although some groups may contain several persons who understand the techniques of faculty development from direct experience, appointment to the committee does *not ensure* that such knowledge and experience will be present. Moreover, while reliance on volunteers can mean a dedicated membership, such reliance may lead to unstable management of the program. Conflicts among members may also damage committee morale and disrupt its functioning. Finally, the time demands on the chairperson of the committee may be exorbitant. When a committee becomes involved in developing a number of staff development sessions each year or is given the task of overseeing and coordinating a comprehensive program, the expectation that its chairperson can maintain a full teaching load and meet other contractual responsibilities may not be realistic. However, granting released time to one faculty chairperson, while other committee leaders retain normal work loads, is courting "political" problems both for the administration and for the staff development program.

In spite of these liabilities, I feel the committee model can be effective if at least three basic requirements are met. First, it needs strong administrative support, openly stated and backed by the funding necessary for a respectable program. Both announced support and reasonable budgetary provisions are necessary if committee efforts are not to become an exercise in futility. Second, the committee must have competent leadership and members willing to work hard and long to develop and implement its programs. The commitment of time and energy can be substantial not only for the chairperson, but also for the dedicated member. Finally, guidelines for the committee's operation and for its releationship with the administration and the faculty as a whole must be clearly spelled out. Without at least these three essentials, the committee model is doomed to disappoint the faculty and thus to become a source of conflict rather than cooperation within the governance system.

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More individualized learning and computer-assisted instruction are only two of the changes that lie ahead.

instructional change: some predictions

james o. hammons

In the opening article, I attempted to outline some of the forces for and against change. Those forces, as well as others yet unknown, are at work in the more than twelve hundred two-year colleges in the country. The forces themselves and the values awarded each naturally vary from college to college. Thus, one cannot forecast changes at any one college without a careful analysis of that specific situation. Also, as this generation has learned, ours is an era in which overnight happenings, such as the Arab oil embargo, can have dramatic effects on our society. This lack of stability makes predicting a very hazardous business. However, if I may take the same liberties as the nightly weather forecaster, who now uses such cautious words as "There is a 60 percent chance of rain tomorow provided that . . . ," I will go ahead anyway. The basis for these predictions is largely personal knowledge of and involvement with what some of the "pace-setting" colleges are now doing. I assume, optimistically, that the change vector has a positive direction, that it is increasing in force, and that what some of these colleges are doing today is what many other colleges will be doing in ten years. With this assumption in mind, I will make some educated "guestimates"

about what Lamar Johnson might find if he were to repeat his 19[illegible] survey in 1987.

1. *By 1987, most colleges will be making at least a token commitment to the systems approach to instruction.* The past ten years has witnessed a decade of piecemeal experimentation with the individual components of a "systems" approach. Thus, faculty in community colleges across the country have tried writing instructional or "behavioral" objectives, peer tutoring, objective-based or criterion-referenced testing, and "mastery learning" grading approaches. However, while at present the number of faculty experimenting with *total* programs which use a systematic approach (P.S.I., and audiotutorial) is much smaller, this number will grow substantially.

2. *The use of individualized instruction will be widespread.* The increasing interest in individually focused rather than group-based instruction is shown by the data from Pat Cross's 1974 study of a random sample of community colleges. When compared with the results of her 1970 study, these data demonstrated conclusively that "the predominant trend is toward individualized instruction: self-pacing, programmed instruction, and the use of skills centers have all showed remarkable increases. Self-pacing experienced the greatest growth; its use jumped from 31 percent of the colleges sampled in 1970 to 68 percent in 1974" (Cross, 1975). Increased interest was also shown in programmed instruction (44 to 74 percent), in experimenting with "pacing methods" (emphasizing achievement regardless of time taken—68 percent in 1974), and in the use of skills centers (36 to 87 percent). All are developments intimately related to the use of individualized teaching methods. Cross's findings regarding what colleges are doing are very similar to the findings of a needs assessment of colleges in the Middle States and Northeast Accrediting Regions. In this study, the authors reported that "one-half of those polled responded that they had some need for staff education in developing and using individualized instructional materials, and 17 percent more said their need was critical" (Hammons and Wallace, 1975).

3. Paralleling the increased emphasis on individualized instruction and encouraged by the need for more flexible delivery systems, wide use of various approaches to *programmed learning will become quite common by 1986.* This development will be facilitated by the availability of good-quality, commercially prepared materials in a wide variety of courses and by the ability of faculty members to develop their own materials. The form taken by these materials will range from simple

paper-pencil programmed workbooks to sophisticated, computer-assisted instruction models.

4. If commercial publishers are able to produce relevant materials of decent quality at reasonable prices, *the use of simulations and games will increase rather dramatically by 1986.* As Coombs suggests, this is due in part to the ability of such activities to provide experience—"experience that the participant otherwise would not be able to obtain, perhaps because the real thing is too time consuming, or too expensive, or too dangerous" (Coombs, 1975, p. 2). This approach, rather than concentrating on facts, concentrates on process, on interaction, and on understanding situations through actual involvement.

5. *Computer-managed instruction will become more popular* as teachers increasingly realize the difficulty of managing large numbers of students moving through individually paced course materials. At present, computers are used as a teaching device in only a few large colleges or in institutions with outside funding. The relatively high costs of computer-assisted instruction (CAI) and the lack of trained personnel, combined with the availability of a large variety of other less expensive developments, will continue to delay adoption of CAI. However, the use of computer-managed instruction (CMI) will grow as knowledge of potential effectiveness of test centers such as those in operation at Burlington County College (New Jersey) and Brookdale Community College (New Jersey) becomes more widespread.

6. *Group-oriented applications of media, such as film, television, sensoriums, and tele-lectures, will also increase* as colleges look for ways to make their classrooms compete with the quality of the mass media to which students have become accustomed. Advancements like tape cassettes, slide-tape programs, tele-lectures, student response systems, video cassettes, and single-concept 8-mm film loops are presently used by only a small percentage of community college faculty members. With new inventions like the revolutionary video discs already on the scene, and yet more significant support on developers' drawing boards, it is safe to assume that the present hiatus between technological development and common usage could widen. However, the recent interest in staff development, coupled with the need to make delivery systems more flexible, will contribute to a situation in which large numbers of teachers become competent in the use of sophisticated media.

7. Because of a rapid decline in the number of full-time students and a resulting shift toward serving the needs of part-time students, *large numbers of colleges will implement more flexible delivery systems*

for instruction. They will, out of necessity, critically reexamine the conditions under which they offer courses for part-time students. The results will be more store-front operations, more in-plant courses from 4:30 to 7:30 p.m., more Saturday classes, and more short-term courses offered on a "drop-in," one- to five-night basis. As funds for software and hardware become available, this development will be accompanied by "packaged" self-study courses on video-discs or in cassette form which can be checked out of the library.

8. Because it has pedagogical soundness and basic simplicity and because it does not require physical plant modifications, expensive hardware, or additional personnel, *mastery learning is perhaps the one single innovation most likely to catch on in the majority of colleges.* Although to date the concepts of Benjamin Bloom and John Carroll, as espoused in Bloom's 1968 article entitled "Mastery Learning," have been little used in the community college (Cross, 1975), they are ideas whose "time has come." The same pressures that are now causing state legislatures to consider competency-based evaluations of the reading and mathematic skills of prospective high school graduates will contribute to the widespread adoption of a mastery learning approach in community college classrooms.

9. *More attention will be given to the affective domain.* In the past, the major emphasis has been on the acquisition of cognitive content. As knowledge continues to increase, teachers will realize the futility of attempts to "pour in more" and will focus more on developing positive attitudes toward learning.

10. As colleges look for more effective and efficient ways of instructing an increasingly diverse student clientele, *classroom structures and modes of instruction will become more varied.* Thus, whereas the prevailing pattern for most classes is now a Monday-Wednesday-Friday lecture, the class schedule of the future is more likely to be a Monday large-group mediated presentation, a midweek independent study assignment in a learning laboratory, and an end-of-the-week small-group seminar or evaluation session. Such varied usage will benefit students by giving them a variety of ways to learn and, thus, by responding to a greater number of learning styles.

11. As the pendulum continues to swing toward a programatic, occupationally oriented curriculum, *cooperative education programs, in which students receive pay and credit for learning on the job, will escalate.* Employers' demands for better preservice education, coupled with student concerns about relevant education and with college budget pressures,

will continue to encourage employer and college to work together to increase the "job fit" of new graduates by developing cooperative education programs.

12. *Administrative policies and procedures will change.* For instance, nonpunitive grading systems are already quite evident, and the coming years will see similar moves toward continuous-entry, continuous-exit registration systems and more flexible faculty load systems—all designed to facilitate more personalized approaches to instruction. Clearly, these changes will be generated by the instructional developments already mentioned. As instructional methods change, colleges will be forced to reexamine many of their established procedures.

13. Whether because of budget pressures or the realization of its educational value, *significant numbers of colleges will move toward some form of differentiated staffing.* Evidence of this development is already apparent in the number of colleges using instructional assistants in laboratories (both conventional and aduititorial), the employment of instructional tutors (who work a forty-hour week) in independent study skills laboratories, and the use of students as tutors (Cross, 1975). Although they were initially employed as "supplements" or "additions to" the regular full-time faculty, colleges will soon utilize them "instead of" and thus free highly paid teachers for the more critical tasks of preparing, evaluating, and managing instruction.

14. *The "master" teacher concept will gain in popularity.* Somewhat related to the trend toward differentiated staffing will be an effort by some faculty members to become increasingly sophisticated about the teaching-learning process. To fully utilize their talents, colleges will designate these persons as "master" teachers with responsibility for assisting their colleagues or for heading up faculty teams.

15. *The search for the "best" match between the student's learning style and the method of instruction will continue, along with the search for a scientific means of determining how individual students learn best.* Although now centered at Oakland Community College (Michigan), this effort will spread all over the country, as several colleges experiment with various approaches.

16. *Interest in evaluation will heighten.* Coupled with the increased concern about improving instruction, new attention will be given to testing and other forms of evaluation. Instructors will seek more innovative and valid ways not only to test students but to determine whether students' knowledge and attitudes actually did change as a result of instruction. As this movement progresses, the meaning of

terms such as formative, summative, and diagnostic evaluation, and distinctions between norm-referenced and criterion-referenced evaluation, will be common knowledge to faculty members.

summary

The people's college is facing perhaps the greatest challenge in its seventy-five year history, the challenge to change the very core of its existence, the heartbeat, if you will, of the institution—the teaching-learning process.

In this issue we have identified forces operating for and forces operating against change; we have examined the varying perspectives of several constituencies; we have examined several approaches to causing change; and we have made some predictions about the results of all this.

However, in the final analysis the actions of human beings are what determine the future—just as they have determined history. It is apparent, then, that the ability of the community college to change depends on the ability of the staff—and thus the future of the two-year college is inextricably bound to the success of a neophyte staff development movement.

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instructional change: sources and information

elizabeth rinnander

The current era in instructional development represents a time of catching up. Only now are teachers beginning to deal with the problems presented by the past decade's drive for educational opportunity via open admissions, which brought onto campuses diverse students with varying learning rates and styles. Cross (1976), in her address to the AACJC 56th Annual Meeting, describes the instructional revolution in which individualized, self-paced methods have come to the fore. She predicts that the shift in emphasis from "teaching" to "learning" will require teachers of the 1980s to be skilled diagnosticians and treaters of learning problems. Self-paced, competency-based education will replace the concepts of credits, grades, and semesters.

Two *New Directions for Community Colleges* issues have examined the how-to's of implementing innovative instruction (Garrison, 1974) and using instructional technology (Voegel, 1975). The former volume contains articles which discuss the institutional framework and attitudes needed to stimulate instructional change; how student and faculty evaluations can be used as positive reinforcements to improve instruction; and how faculty members can make use of learning centers. The Voegel volume indicates the range of instructional technology

in use in community colleges. The topics include the use of modules, audiotutorials, and contracts to individualize learning; cooperation between the college and the public television station; reaching inaccessible students through instruction by telephone; and the use and expansion of the campus learning center.

Another compendium of articles focusing on instructional innovation and technology is offered by Terwilliger, who edited the proceedings of the 1975 Conference of the Community College Association for Instruction and Technology. The subjects discussed at that gathering included the involvement of faculty members in a learning resources program; the team approach to instructional development; models for media center operation; and the evaluation of instructional development.

The Educational Testing Service surveyed community colleges in 1970, and again in 1974, to determine both the attitudes of teachers toward the influx of students with a variety of learning styles and speeds and the methods they use to deal with these students (Cross, 1975). The finding was, encouragingly, a pronounced trend toward individualized instruction and an increased willingness of faculty members to share teaching responsibilities with others. Dramatic increases were found in the use of pacing methods, programmed instruction, skills centers, peer tutoring, team teaching, and cooperative education programs. Although the earlier tendency had been to blame students and their parents for low academic achievement, by 1974 most respondents cited poor elementary and secondary schooling as the major cause.

personalized and mastery learning

The growth of interest in personalized learning, emphasizing the development and realization of the self-concept in the learning process, prompted Roberts (1975) to form a model based on Jungian theory and the Myers-Briggs Type Indicator, a personality test commonly employed by Jungian analysts. When samples of full-time instructors and first-term freshmen in community colleges were compared, the most significant difference between their typologies was in Sensing versus Intuition: the students scored high on Sensing and Judging and the teachers high on Intuition and Perception. These types learn in different ways, Sensing in a systematic manner using primarily the five senses and Intuition in a flexible manner relying heavily on language. This basic mismatch can be corrected, indicates the author, by the use of self-concept theory, which may play a major role in humanizing education.

Probably better known than the Roberts model are the integrated learning programs called the Personalized System of Instruction (PSI) and mastery learning. However, despite their familiarity, the 1974 ETS survey referred to above found that less than a quarter of the respondents were using these programs. To aid those teachers and institutions who are attempting these innovations, the ERIC system includes documents from persons and colleges who have successfully implemented PSI and mastery learning.

For instance, Hinrichsen (1975) compares traditional lecture methods with a PSI approach in an introductory police science course at Cerritos College (California). Students' conservatism may be indicated by the fact that significantly fewer students elected the PSI section of the course. Although more PSI students received high grades, more also withdrew from the course. Although the author indicates that the lack of proper randomization and control groups may render this study suspect, he recommends further study and implementation of PSI. Two other studies of PSI were submitted to ERIC by Taber (1974a, 1974b), who studied students at Cuyahoga Community College (Ohio). According to her findings, a higher proportion of PSI-enrolled students passed an introductory course in engineering technology. PSI-instructed students also scored significantly higher on the final exam and performed as well in the subsequent courses in the series as the traditionally instructed students. The vast majority of the PSI students preferred that method of instruction.

Mastery Learning, long lauded and used with varying success as a technique with younger children, has recently been introduced into the curricula of community colleges. A pilot project at Kennedy-King College (Illinois) is reported by Magidson (1975). Following a review of several instructional models, the author assisted a faculty member in developing an individualized learning module for a social science course, based on Herrscher's model of individualized instruction—a Mastery Learning approach. Although students' achievement on posttest scores did not meet the instructor's expectations, 80 percent of the students rated highly their enjoyment of the learning experience. Sharples and others (1976) describe the procedures used by the South Carolina State Board for Technical and Comprehensive Education in developing a two-year curriculum for civil engineering technology, an open-ended, individualized program that relies heavily on the use of audiovisual aids and hands-on experience with software and equipment. Faculty members in the ten institutions in the state which offer a civil engineering technology program formed a committee to assess the needs of their students. The group suggested eleven

courses which they felt should be included, identified course objectives, and compiled a list of 163 competencies to be required of graduates of the program. Faculty members were then hired to write the individual courses with the help of consultants from the University of South Carolina. Each course was validated by field testing after it was completed.

Still another example of mastery learning is presented by an ERIC Topical Paper (Jones and Others, 1975), which describes the implemenation of this approach to instruction at Olive-Harvey College (Illinois). Included are the development of course objectives, the establishment of achievement criteria, the definition of learning units and identification of learning elements, and the construction of diagnostic tests and prescriptive remedial materials. The Mastery Learning approach was found to be generally successful at this college, in part because of its flexibility. Traditional group instruction within the fixed academic year is possible, thus eliminating a need for administrative restructuring, complex instructional hardware, extensive curricular change, or great monetary outlay.

computer-assisted instruction

One of the most common queries received here at the ERIC Clearinghouse for Junior Colleges is "How can our college use computer-assisted instruction (CAI)?" The ERIC files are heavy with examples of institutions' innovations in this area, among them the following.

Bristol Community College (Massachusetts) undertook a national survey to assess the use of CAI. On the basis of survey responses, Desmarais and Others (1974) selected eight institutions as leaders in the CAI field. Site visits provided informative descriptions of the CAI facilities for three Massachusetts colleges. In their report, sample budgets are presented, along with sample CAI programs illustrating simulation, problem solving, drill and practice, and tutorials. Recommendations for implementation and a bibliography on CAI are also included.

Zimmer has edited a report (1976) compiled from information supplied by instructors participating in the National Science Foundation's community college field test of PLATO IV (Programmed Logic for Automatic Teaching Operations)—a computer-based system developed at the University of Illinois. The case reports in accountancy, biology, chemistry, English, and mathematics include interview and questionnaire data as well as graphs depicting student-use data for each

course. Survey instruments are also included. Other documents describing the use of PLATO were submitted by Avner and Avner (1976) and by Magidson (1974). The former is a useful short summary of Zimmer's 369-page report. Magidson utilized PLATO in developing a lesson on "divisibility rules" for students preparing to take the GED (General Education Development exam. All the students who used the PLATO approach enjoyed the learning experience, although less than 80 percent were able to achieve at the mastery level predicted by the investigator.

Howard and Others (1975) offer a comprehensive plan for the use of instructional computing in the community colleges of Washington state. After defining the objectives and content of such programs, the authors describe what resources are needed and how they should be acquired. The aim is a planned, coordinated computing network and efficient use of resources. A glossary of terms and a bibliography are appended, too.

The Peralta Community College District (California) reports the findings of their task forces assigned to develop an educational services master plan (Adams and Others, 1975). One of these committees studied various educational delivery systems used by other districts and ranked CAI best on the basis of its low cost, high versatility, and low "perturbation" factors. An assessment of the current use of computers at Peralta is also included in the report.

educational tv

Educational television has been used as a productive tool not only for increasing student enrollments, but also for improving the learning experience itself. The leader in the educational TV field is the Coast Community College District (California). Segalla (1976), a staff member of that district's Golden West College, reviews the research on the effectiveness of educational TV compared with traditional, face-to-face instruction. In the author's opinion, TV has proved useful for teaching basic knowledge, but it receives poor marks for teaching cognitive skills requiring more than "Level I" knowledge.

Purdy and Icenogle (1976), also of the Coast District, offer a preliminary evaluation of the PBS television course "Classic Theatre: The Humanities in Drama." They show that the curriculum is used in very diverse ways by different institutions. Other evaluations of educational television are presented in Teraz and Ruth (1975a, 1975b) and *KOCE-TV* . . . (1974). The first two of these ERIC documents describe

needs assessments related to the Coast District's noncommercial public UHF television station. These mail and telephone surveys of the citizenry of the district showed a great deal of interest in, and use of, KOCE's programming. Enrollment is up 133 percent from the initial registration figures in Spring 1973, and more people are enrolling in television courses for reasons other than earning credit toward a degree.

Educational TV appears to be thriving in other parts of the country as well. Parsons (1975) describes Hagerstown Community College's Operation Enable, which serves students in Maryland who cannot or would not attend classes on the main campus. The author feels "guarded optimism" about the impact of the program on the inmates of two local state prisons. HCC participates also in the Maryland College of the Air television network, which is described. In Illinois, Waubonsee Community College sponsors a televised child psychology course, which is evaluated by Frazer (1975). Students seemed to prefer the flexibility of the televised programs in the college's Learning Resource Center to the more structured approach of at-home cable television viewing. *Instructional Television Progress Report, 1971–74* (1974) provides evaluative data on the televised courses offered by the Los Angeles Community College District. Art I, Astronomy I, Georgraphy I, Health 10, and Psychology I were offered between 1970 and 1974. The data reveal no significant decrease in enrollments on campus that could be attributed to the TV courses. The distribution of grades earned by TV students does not vary significantly from that of the on-campus enrollees in these courses.

Houston and Ryg (1975) describe an unusual twist in educational technology: radio courses at Virginia Western Community College. The authors report that about 82 percent of the students enrolled in radio courses planned to earn a degree or certificate. More than half of the enrollees were employed in the law enforcement field. Very high audience ratings were given to the academic instruction, the instructor's delivery, the grading procedures, the availability of instructors, the technical quality of programs, and the radio reception. The recommendations of the report include better coordination of nontraditional course offerings and a more efficient method of selecting courses and instructors.

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index

A

Adams, S., 85, 87
Administration, future procedures in, 79
Affective domain, future of, 78
Allegheny County, Community College of, Learning Center at, 17
American Association of Community and Junior Colleges (AACJC), 58, 63; Council of Universities and Colleges of, 60; Junior College Leadership Program of, 56
Appalachian State University: faculty development program of, 20, 21; vocational-technical teacher preparation program at, 57
Avner, E., 85, 87
Avner, R. A., 85, 87

B

Bailey, S. D., 54
Berchin, A., xiv, xvii
Big Bend Community College, preparation of learning center staff at, 57–58
Blocker, C. E., 66
Bloom, B. S., 6, 78
Bogart, Q. J., 60–61, 63
Brawer, F. B., 55
Bristol Community College, computer-assisted instruction at, 84
Brookdale Community College, computer-managed instruction at, 77

Burlington County College: computer-managed instruction at, 77; systems approach to instruction at, 6–7, 31–36
Bushnell, D., 24, 29

C

Caldwell Community College and Technical Institute, instructional change at, 19–22
California, University of, at Berkeley, Junior College Leadership Program at, 56
California, University of, at Los Angeles: dissertation at, 54; ERIC Clearinghouse for Junior Colleges at, 61; Junior College Leadership Program at, 56; Study of Community Colleges at, 55
Carroll, J., 6, 78
Cerritos College, Personalized System of Instruction at, 83
Chairperson: inappropriate as change agent, 47; role of, 13–18
Chan, B., 65, 68, 73
Change: facilitation of, 33–35; obstacles to, ix–x, xiv–xv; reasons for, x–xii, xiii–xiv, 32–33. *See also* Instructional change
Change agent: advantages of internal, 46–47; attributes of, 47–48, 49–52; chairperson inappropriate as, 47; external, 37–43; internal, xvi, 45–52; strategies of, 48–49
Chavez, J., 58–59, 63
Classroom structures and modes, future of, 78
Coast Community College District, educational television at, 85
Cognitive Style Mapping, 21, 79
Cohen, A. M., 55
Collective bargaining, and instructional change, 17
Colorado, University of, Junior College Leadership Program at, 56
Colorado Mountain College, innovation at, xi
Committee. *See* Staff development committee
Community College of Allegheny County, Learning Center at, 17
Computer-assisted instruction (CAI), studies of, 84–85
Computer-managed instruction, future of, 77
Consultants: and instructional change, 37–43; roles of, 38–40; using, when and how, 40–42
Coombs, D. H., 77, 80
Cooper, J. H., 59–60, 63
Cooperative education, future of, 78–79
Cowan, G., 57, 63
Cross, K. P., 76, 78, 79, 80, 81, 82, 87
Cuyahoga Community College, Personalized System of Instruction at, 83

D

Delivery systems, flexible, future of, 77–78
Delta College, innovation at, xi
Desmarais, A., 84, 87
Developing Institutions Program, funding by, xii
Dewey, J., 5
Drucker, P., 8

E

East Carolina University, professional journal at, 62
Educational Professions Development Act, funding by, xii, 56, 58–59
Educational television, studies of, 85–86
Eggebrecht, D. W., 54
Evaluation, future of, 79–80

F

Faculty: differentiated staffing patterns for, 79; inservice university programs for, 58–59, 63; and "master" concept, 79; university field services for, 59–61; university graduate programs for, 55–58, 63
Faculty development. *See* Instructional change
Fader, D., 57, 63
Fawley, P. C., 54
Florida, University of: Center for State and Regional Leadership at, 61; dissertation at, 54; graduate program at, 57; Junior College Leadership Program at, 56
Florida State University: Center for State and Regional Leadership at, 61; Interdepartmental Master's Degree Program for Junior College Instructors at, 55–56; Junior College Leadership Program at, 56
Frazer, G. W., 86, 87

G

Games and simulations, future of, 77
Garrison, R. H., 81, 87
Golden West College, innovation at, xi
Goodman, A., xvi, 45–52

H

Hagerstown Community College, educational television at, 86
Hahn, T. C., 54
Hammons, J. O., ix–xvii, 27–28, 37–43, 67, 75–80
Harrisburg Area Community College, Professional Growth and Instructional Development Committee (PGID) at, xvi–xvii, 66–73
Hatfield, T. M., xvi, 23–29
Haywood, M. L., 54
Hinrichsen, K. A., 83, 87
Houston, C. A., 86, 87
Howard, A., 85, 87

Hunter, W., xvi, 37–43

I

Icenogle, D., 85, 87
Illinois, University of, and Programmed Logic for Automatic Teaching Operations (PLATO IV), 84
Individualized instruction, future of, 76
Instruction: classroom structures and modes for, 78; computer-assisted, 84–85; computer-managed, 77; flexible delivery systems for, 77–78; individualized, 76; method of, and learning style, 79; Personalized System of (PSI), 82–83; systems approach to, 1, 6–7, 32, 76
Instructional change: case study of, 1–11; chairperson's role in, 13–18, 47; and collective bargaining, 17, consultants' role in, 37–43; cost study of, 15; evolutionary, 4–6; factors in success of, 19–20; institutional needs in, 27–28; obstacles to, 8–10; predictions about, 75–80; president's role in, 23–29; problems in, 16–17; process of, 14–16; reasons for, 2–3, 10–11, 45–46; revolutionary, 6–7; sources and information for, 81–88; staff development committee role in, 65–74; trustees' role in, 31–36; university role in, 53–64.
See also Change
Iowa, University of, graduate program at, 57

J

Jaggard, S. B., xv, 1–11
Jenkins, C. G., 54
Johnson, B. L., ix, xi, xvii, 55, 76
Jones, E. L., 84, 87

K

Kellogg Foundation, W. K.: funding by, xii, 21; Junior College Leadership Program of, 56
Kennedy-King College, mastery learning at, 83
Kirk, W., 55, 64
Kintzelentz, A. D., 54

L

League of Innovation, cost studies by, xiv
Learning: mastery, 78, 83–84; programmed, 76–77; style of, and instructional method, 79
Lewin, K., xiii
Lombardi, J., 55
Los Angeles Community College District, educational television at, 86
Luther, M., 24–25

M

McCabe, R., 60, 63
Magidson, E. M., 83, 85, 87
Manilla, S. J., 72
Marquette University, dissertation at, 54
Massachusetts, University of, graduate program at, 57
Mastery learning: future of, 78; studies of, 83–84
Mayhew, L. B., ix, xvii
Media: educational television as, 85–86; group-oriented, future of, 77
Miami-Dade Community College: innovation at, xi; internal change agent at, xvi
Michigan, University of: dissertation at, 54; doctor of arts program at, 57; Junior College Leadership Program at, 56
Michigan State University, Junior College Leadership Program at, 56
Mink, O., 54–55
Morgan, D. A., 56, 64
Myers-Briggs Type Indicator, 82

N

National Science Foundation: funding by, 55, 58–59; Programmed Logic for Automatic Teaching Operations (PLATO) test by, 84
North Carolina State University, professional journal at, 62
Northern Illinois University, dissertation at, 54

O

Oakland Community College: Cognitive Style Mapping at, 21, 79; innovation at, xi
O'Banion, T., 56, 64
Odm, J. A., 54
Oklahoma State University, dissertation at, 54
Olive-Harvey College, mastery learning at, 84

P

Parkland College, faculty committee at, xvii, 65
Parsons, M. H., 86, 87
Pennsylvania State University: Center for the Study of Higher Education at, 61, 67; dissertation at, 54
Pennypacker, M., xvi, 31–36
Peralta Community College District, computer-assisted instruction at, 85
Personalized System of Instruction (PSI), studies of, 82–83
Pima Community College, innovation at, xi
President: responsibilities of, 25–27; role of, 23–29
Programmed learning, future of, 76–77
Programmed Logic for Automatic Teaching Operations (PLATO), studies of, 84–85
Publications, university role in, 61–62
Purdy, L., 85, 87

R

Research, and instructional change, 54–55, 62
Rinnander, E., 81–88
Roberts, D. Y., 82, 88
Rock Valley College, innovation at, xi
Roger Williams College, innovation at, xi
Roueche, J., 54–55, 64
Ruth, M. W., 85–86, 88
Ryg, C. J., 86, 87

S

Saint Louis City-County Junior College, innovation at, xi
Sangamon State University, professional journal at, 62
Santa Fe Community College, innovation at, xi
Schultz, R. E., xvi, 53–64
Segalla, A., 85–88
Sharples, D. K., 83–84, 88
Simulations and games, future of, 77
Smith, C., 60, 63
Smolich, R., 56
South Carolina, University of, consultants on mastery learning from, 84
South Carolina Board for Technical and Comprehensive Education, mastery learning curriculum of, 83–84
Staff development committee: accomplishments of, 71–72; advantages and disadvantages of, 72–73; at Caldwell Community College, 20; at Harrisburg Area Community College, 66–73; history of, 66–68; operation of, 69–71; at Parkland College, xviii, 65; rationale and philosophy of, 68–69; responsibilities of, 67; role of, 65–74
Stallings, D. N., xvi, 19–22
Sutton, C., 68, 73
Suzuki, S., 24
Systems approach to instruction, 1, 6–7, 32, 76

T

Taber, M. R., 83, 88
Teachers College (Columbia University), Junior College Leadership Program at, 56
Television, educational, studies of, 85–86
Teraz, C. E., 85–86, 88
Terwilliger, G. H., 82, 88
Texas, University of, Austin: community college teaching program at, 57; Junior College Leadership Program at, 56
Thomas, W. E., xv–xvi, 13–18
Tirrell, J. A., 65, 73
Trustees, role of, 31–36
Tullis, L. V., 54

U

United States Office of Education, funding by, 55
Universities: field services of, 59–

Universities (continued)
61; future roles of, 62–63; graduate programs at, 55–58, 63; inservice programs of, 58–59, 63; publications by, 61–62; research by, 54–55, 62; role of, 53–64
Utah, University of, dissertation at, 54

V

Virginia Commonwealth University, professional journal at, 62
Virginia Western Community College, educational television at, 86
Voegel, G. H., 81–82, 88

W

Wallace, T. H. S., xvi–xvii, 65–74, 76, 80
Washington, University of, Junior College Leadership Program at, 56
Washington State University: field service at, 39; preparation of learning center staff at, 57–58
Waubonsee Community College, educational television at, 86
Wayne State University, Junior College Leadership Program at, 56
West Virginia, University of, dissertation at, 54
Western Piedmont Community College, innovation at, xi
Woods, W., 67

Z

Zimmer, A. L., 84–85, 88
Zion, C., 68, 73

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The need for instructional change that will result in more effective, more efficient, less anxiety-producing learning and in improved self-concepts for a variety of students is well documented in the literature of the community college. But is it reasonable to expect instructional change? Or will colleges retreat into the security of traditional practice? One way of answering is to examine the forces that are working both for and against innovation and experimentation. In the first half of this issue, faculty members, administrators, and trustees present their views. The second half suggests several different approaches to needed change.